WinFX3Net Configuration Tool (version 6.4)
For Fire Alarm System FX 3Net

Schneider Electric

CONTENT

General

The WinFX3Net program enables you to configure a system of up to 32 panels of the FX family with any type of loop controllers; LC, CLC, ALC or SLC.

The program is written for the following 32-bit Windows versions: Windows 2000, Windows XP, Windows Vista and Windows 7.

The general procedure for working through the configuration is the following:
- Collect all necessary documentation for the project
    - o **Detector location plans**
    - o **Cabling drawings**
    - o **List of texts to be displayed by the panel in alarm conditions**
    - o **etc.**
- Start the program
- Select File - New from the main menu
- Add panels to the system
- For each panel, select it in the left pane of the window
- Activate the General Panel Data form
- Go through all pages on the General Panel Data form modifying the settings as appropriate
- Close the General Panel Data form and activate the Address and Text Data form
- Select device types for each address to be installed and write the text that the panel should display in alarm condition.
- Close the Address and Text Data form and save the file.
- Prepare the panel for configuration and send the configuration data to the panel.
- Restart the panel and check that it recognizes all addresses correctly and that the texts displayed for the addresses are correct.

The general procedure for doing a modification of an existing configuration is the following:
- Either open a file or read the current configuration from the panel.
- Make any necessary modifications, first to General Panel Data and then to Address and Text Data.
- Save the file on disk.
- Send the new configuration data to the panel.

All of the above items will be explained in detail in this manual.

WinFX3Net Installation

Distribution

WinFX3Net is distributed as an installation package in a file named WinFX3Net_x.y.z_Setup.exe, where *x* is the major version, *y* is the minor version of the program and z is the release number, for example WinFX3Net_6.1.1_Setup.exe.
The installation package does not include a license file since the license is personal. See 'License file' for more information.

Installation

The installation has to be run under an administrators account

The installation package contains the following files:

File name	Comment
WinFX3Net.exe	The executable program file
EsSDL32usb.dll	Communication library
winfx3netdk.txt winfx3netfi.txt Winfx3netgb.txt winfx3netno.txt winfx3netse.txt	Translation files for the user interface of the program
ReadMe-DK.rtf ReadMe-FI.rtf ReadMe-GB.rtf ReadMe-NO.rtf ReadMe-SE.rtf	ReadMe files that are shown at the end of the installation
HASPDInst.exe	License key installation package

In addition, the installation program creates two files to support uninstallation:
unins000.dat
unins000.exe

All files, except HASPUserSetup.exe are installed by the installation program to the following directory:
- **C:\Program Files\Pelco\WinFX3Net\6.3**
HaspUserSetup.exe is installed in a subdirectory:
- **C:\Program Files\Pelco\WinFX3Net\6.3\HASP**

During the installation process, the user (installer) is presented options to select if the License key installation should be run or not. Running the HASP license key driver setup requires a restart of the computer.

The installation program creates icons (links) in the Start menu
- to launch WinFX3Net
- to review the ReadMe file (in the language that was selected for installation)
- to launch installation of the HASP license key drivers
- to uninstall the WinFX3Net package
Optionally the installation program also creates an icon (link) on the desktop
- to launch WinFX3Net

License file

A license information file, named "winfxnet.lic" is required for running the WinFX3Net program. It is looked for in the following directory:
If the Operating System (OS) is Windows 2000 or Windows XP:
- **C:\Documents and Settings\<username>\Local Settings\Application Data\Pelco\WinFX3Net**
If the OS is Windows Vista or Windows 7:
- **C:\Users\<username>\AppData\Local\Pelco\WinFX3Net**

These directories are, however, by default OS settings, hidden and therefore not easily accessible to many users. The WinFX3Net software is therefore programmed to assist the user to place the file in the correct location. The user must have obtained a valid license file and have it available when (s)he starts the program for the first time or when the license is about to expire or has already expired.

The first time start up of WinFX3Net should be performed by the end user, not the person who installed the program because the above mentioned directories are user specific.

When the program is started it looks for the license file in the above mentioned directory and
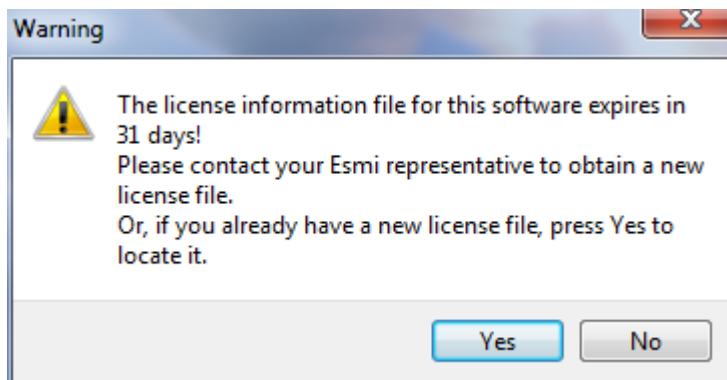- If the file is not found, this dialog will be shown:
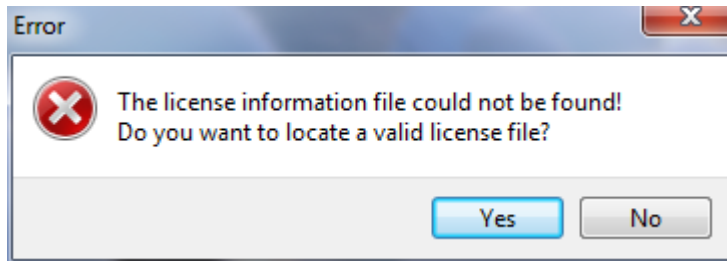
Answering "No" will terminate the program!

- If the file is corrupted or has expired a similar dialog will be shown indicating the error and asking if a valid license file should be located.

- If the file is found but there's less than 60 days remaining of the license time, this dialog will be shown:
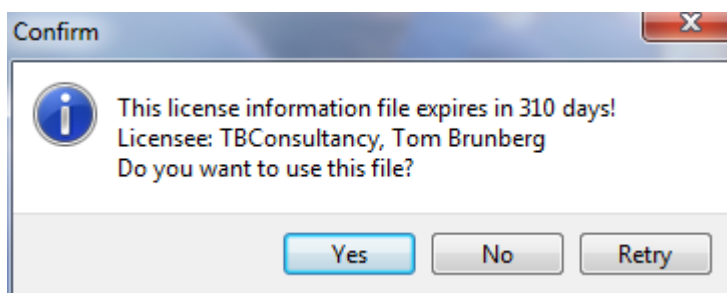

Answering "No" will not terminate the program, the existing license file will be used.

- If the user answers "Yes" to any of the above dialogs, an ordinary file open dialog will be displayed and the user can now navigate to the valid license file and select it.

  Note! The license file that the user selects does not have to be named "winfxnet.lic". The license files may be distributed with a name like "winfxnet[1].lic - company - user" and it is perfectly OK to select a file with such a name. Whatever name the file has, it must of course be a valid WinFX3Net license file.

  The program will then ask for a confirmation:

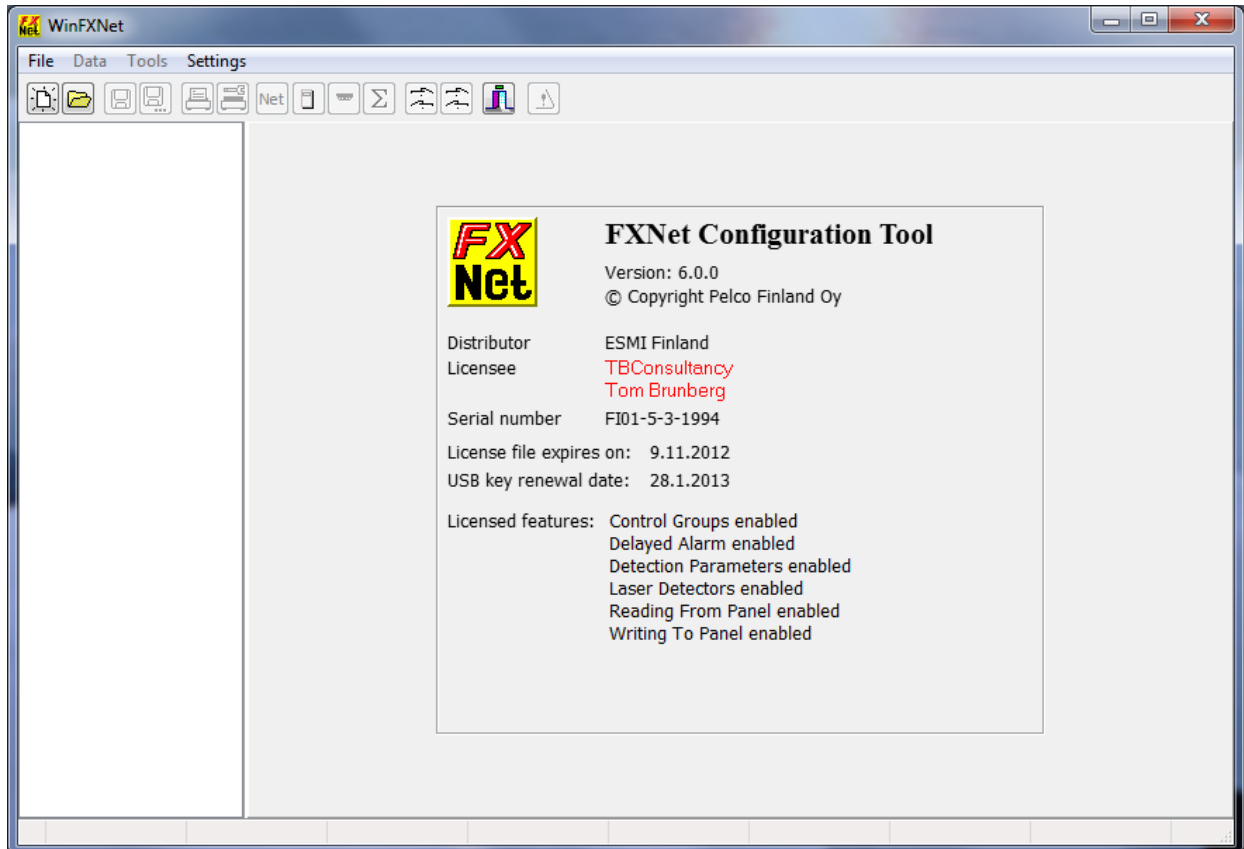Answering "Yes" will make a copy of the license file in the proper directory and with the correct name and then use that file.
Answering "No" will terminate the program if the existing license file is not found, if it is corrupted or if it has expired, or, use the existing file if it is valid but about to expire.
Answering "Retry" will open the ordinary file selection dialog again, to navigate to another file.

Main Window

The main window contains the main menu and a toolbar. You may notice that initially some menu items and toolbar buttons are grayed which means that they are not selectable. They will be selectable as soon as you create a new file or open an existing one.

The menu has the following items:

File	Data	Tools	Settings
New	Network Data	Receive from panel	Language
Open ...	General Panel Data	Send to panel	Display Font
Merge FX file...	Address and Text		Default Data Folder
Merge ESA file ...	Delayed Controls ...		Special settings
Save	Address Reports ...		
Save As ...	Summary of Addresses		
Import ...	Configuration Info ...		
Export ...			
Print ...			
Print Setup ...			
Exit			

The toolbar has the following items:
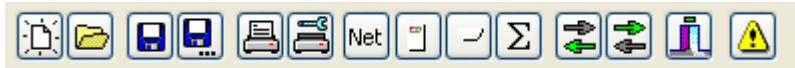
| Button	Corresponding menu selection	Purpose
	File – New	Prepares the program for a new configuration
	File – Open ...	Opens an existing configuration file
	File – Merge FX file ...	Merges an FX file into the current configuration
	File – Merge ESA file ...	Merges an ESA file into the current configuration
	File – Save	Saves the current configuration data in a file using the current filename
	File – Save As ...	Saves the current configuration data in a file using a new filename
	File – Import ...	Imports data from an Excel file
	File – Export ...	Exports data to an Excel file
	File – Print ...	Prints the current configuration data
	File – Print Setup ...	Opens a printer settings dialog
	Data – Network Data	Opens the FXNet form for defining the panels that make up the network
	Data – General Panel Data	Opens the General panel data form
	Data – Address and Text Data	Opens the Address and text data form
	Data – Delayed Controls ...	Opens a form for inspecting/modifying delayed controls
	Data – Address reports ...	Opens a form for listing and sorting addresses and to print the listing
	Data – Summary of Addresses	Opens a form with a summary of currently configured addresses
	Data – Configuration info	Opens a form with information (last modifications by who and when) about the current configuration
	Tools – Receive From Panel ...	Opens a dialog for receiving configuration data from an FX panel
	Tools – Send To Panel ...	Opens a dialog for transmitting configuration data to the selected FX panel
	Settings – Language ...	To select the language for the program. A file named winfx3netxx.txt (where xx is the selected language code) has to reside in the directory of the WinFX3Net.exe.
	Settings – Display font ...	To select a display font for the program
	File – Exit	Terminates the program
		Warning for errors when active and flashing a red border. Shows an error report when clicked.

To start a new project

Select **File – New** from the menu or press the [icon] button on the Toolbar.
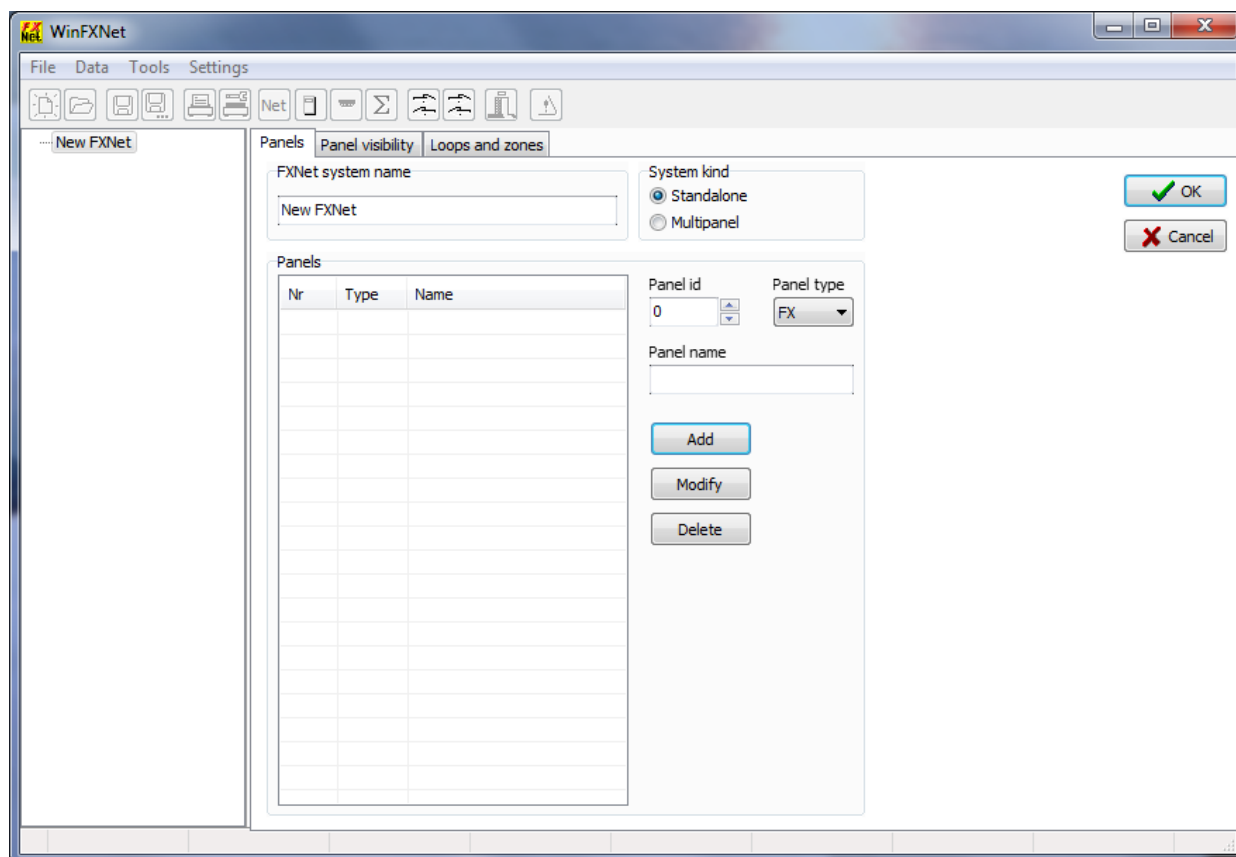
The left pane shows the root of the system with the text 'New FXNet'.

The right pane has the FXNet Data form that consists of three tabbed pages and two buttons, 'OK' and 'Cancel'.

The 'OK' and 'Cancel' buttons are visible on all three pages and have the following functions:
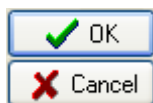
[OK button]   Actuates the changes you have made and saves the panel list to FXNet system data.
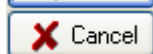
[Cancel button]   Cancels the changes you have made.

FXNet Data form

Select **File – New** from the menu or press the [icon] button on the Toolbar
or, if you already have visited this form earlier select the root item in the left pane and then **Data – Network data** from the menu or press the [Net] button on the Toolbar

The FXNet Data form has three tabbed pages, **'Panels'**, **'Panel visibility'** and **'Loops and zones'**.

The default page is the 'Panels' page. However, the last used page is remembered and shown again when you return to this view.

The Panels page
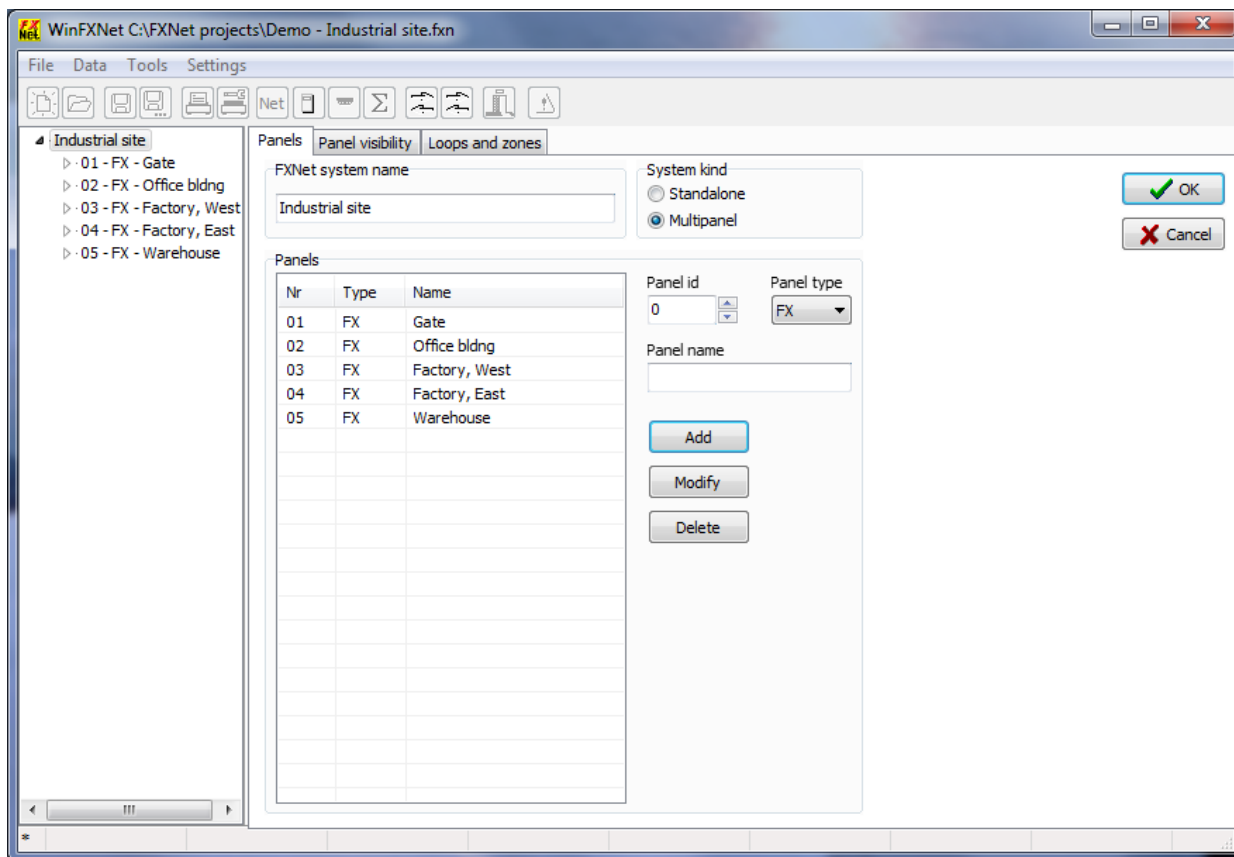
In the edit control 'FXNet system name' you can change the name of the system. The change is reflected in the left pane root item also.

With the 'System kind' control you can define whether the system will consist of only one, standalone panel or of 1 ... 32 FX networked panels. If you attempt to change the setting after you have defined a panel (standalone) or several panels (multipanel), you will be notified that the erroneous panel(s) will be deleted from the list. You then have the option to cancel the change or proceed with it. **Warning! If you, after a change of the system kind and deletion of erroneous panels in the list press OK, all General Panel Data, Address Data and Text Data belonging to the deleted panels are lost!**

Note! The 'System kind' selection might be locked to 'Standalone' and disabled due to license restrictions.

With the 'Panel ID' control you give an individual number for each panel. The panel ID's do not have to be consecutive. If system kind is **standalone**, you can define only one panel, and its ID has to be 0. If system kind is **multipanel**, you can define 1 ... 32 panels and none of them can have an ID of 0.

The 'Type' control defines the type of panel. Available values are 'FX', 'FXL', 'FXM' and 'FXS'. This is only for documentation purposes and has no effect on the configuration of the panel.
In the 'Panel name' field you can write whatever you want to call the panel.
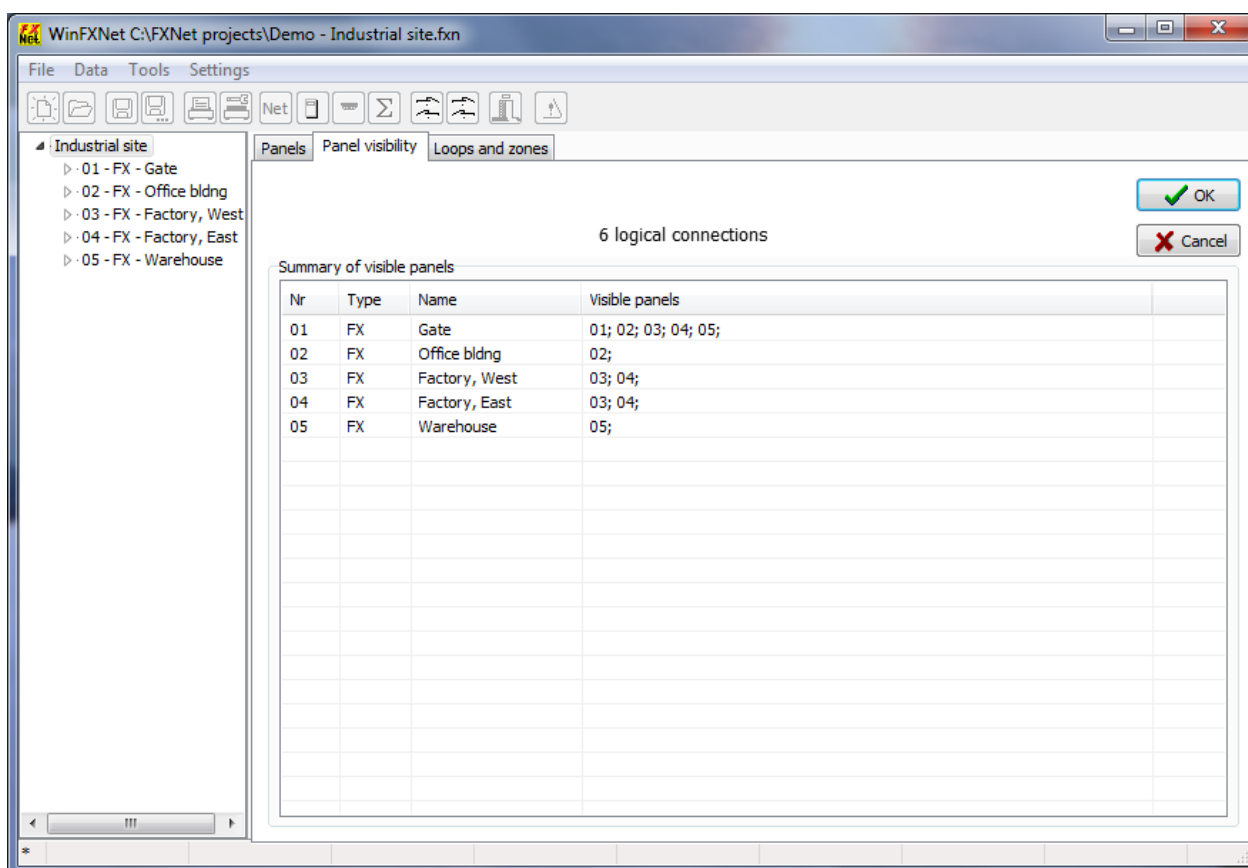
Add	Adds an entry to the panel table, with the ID, Type and Name you have defined
Modify	Modifies the panel Type and Name for the panel you have selected with 'Panel id'
Delete	Deletes the selected panel (defined by the ID) from the table

The Panel visibility page

The 'Panel visibility' page shows the **'Seeing - Visible'** relation between the panels. For each panel you can define which panels it sees, in other words monitors and controls. It also calculates the number of logical connections. The FXNet system is designed for a maximum of 256 logical connections between the panels.

To enter / change visibility definitions, right-click on a row in the table. A popup menu is displayed with three items 'Select ...', 'Copy' and 'Paste'. With the 'Copy' (Ctrl-C) and 'Paste' (Ctrl-V) items you can copy the definition of visible panels of one panel to another. The 'Select ...' item will open a dialog where you can select the visible panels
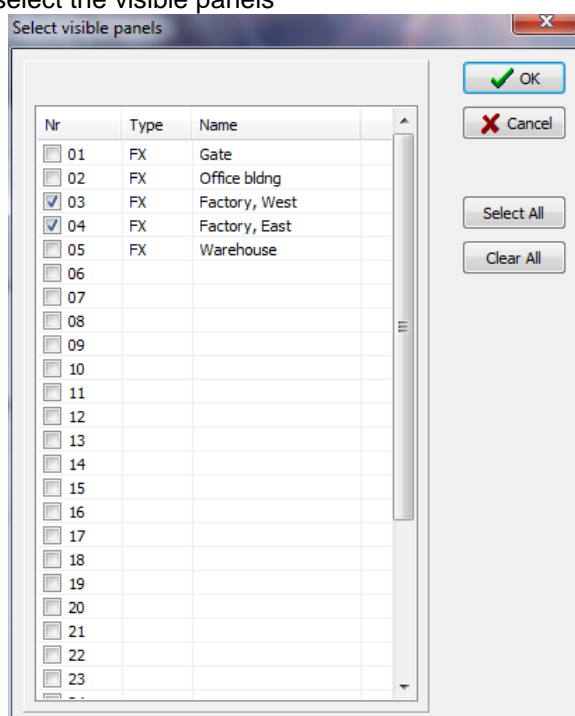
You select the visible panels by checking the boxes for the panels that should be visible to the panel you have selected in the table.

Select All   Selects all checkboxes

Clear All   Deselects all checkboxes

By definition a panel always sees itself. It doesn't matter if you select or deselect it here. It makes it easier to copy a definition among several panels if you select all that are mutually visible.

If you checkmark a panel that is not part of the installation, it will create a constant fault warning when the system is running.

The Loops and Zones page
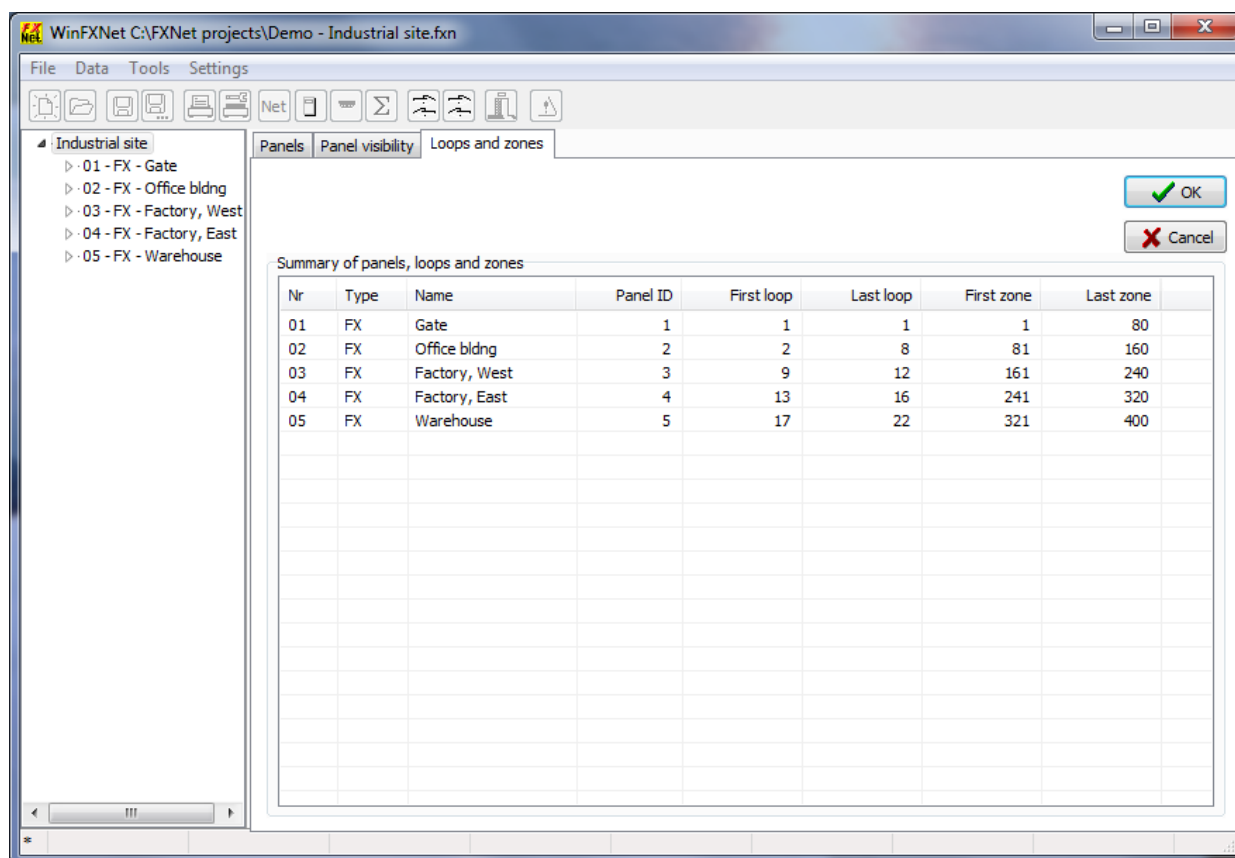
The 'Loops and zones' page shows the loops and zones defined for each panel. This form is only informative; you can not change the definitions here. You define the loop controllers and the loop identifications as well as zone ranges in the individual panel's configuration.

Initially, when you define the panels and go to this page before you press the 'OK' button, the table will show 'NA' for 'not available' since the panels are not yet configured with that information.

Configuring the panels

In the left pane, select the panel you want to configure. This will change the toolbar to disable the 'Net' and the 'Receive From Panel' buttons and enable the 'General Panel Data', 'Address and Text Data', 'Address Summary' and 'Send to Panel' buttons, as well as the corresponding main menu items.
It will also change the meaning of the 'Print' button and corresponding main menu item to print the configuration of the selected panel.
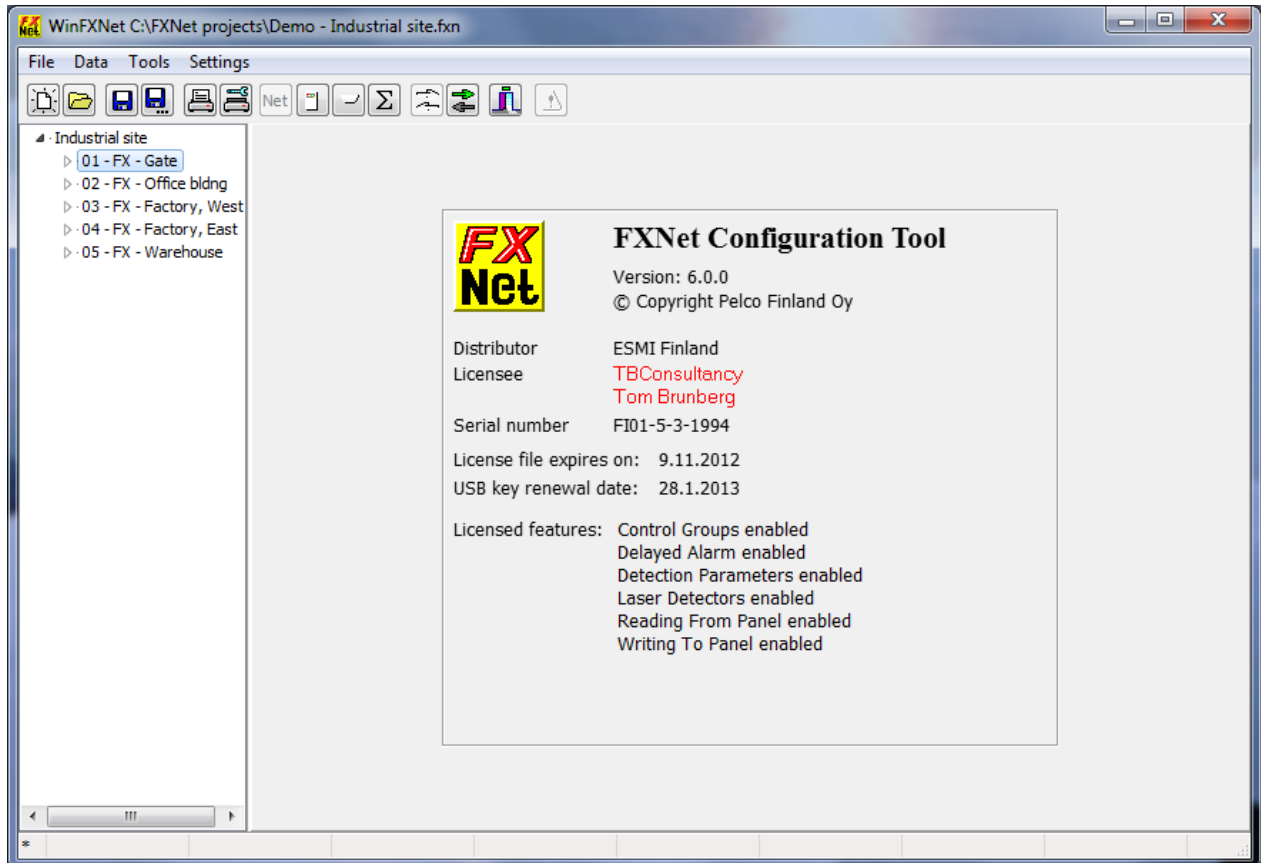
General Panel Data

Select **Data – General Panel Data** from the menu or press the button on the Toolbar to open the General Panel Data form.

It is important to start with the General Panel Data before proceeding to the Address and Text data dialog, because many entries in the General Panel Data affect entries in the Address Data form.

The General Panel Data form is shown. The form has ten pages which are selected by clicking on the tab. Initially the 'Panel info' page is shown.

Panel Info page

On the 'Panel info' page you can enter 250 characters in the description field. Typical entries could be the name and/or address of the building.

The **system name**, given in the network definition, becomes the first line in the panel description and is enclosed in a pair of asterisks. The **panel name** becomes the second line in the panel description enclosed in left and right angle brackets (< and >). **Leave these as such on the first and second line**; otherwise the network view will not be able to extract the system name and the panel name from the description.

With **Logo in display of panel** you can choose which logo the panel shows in its display.
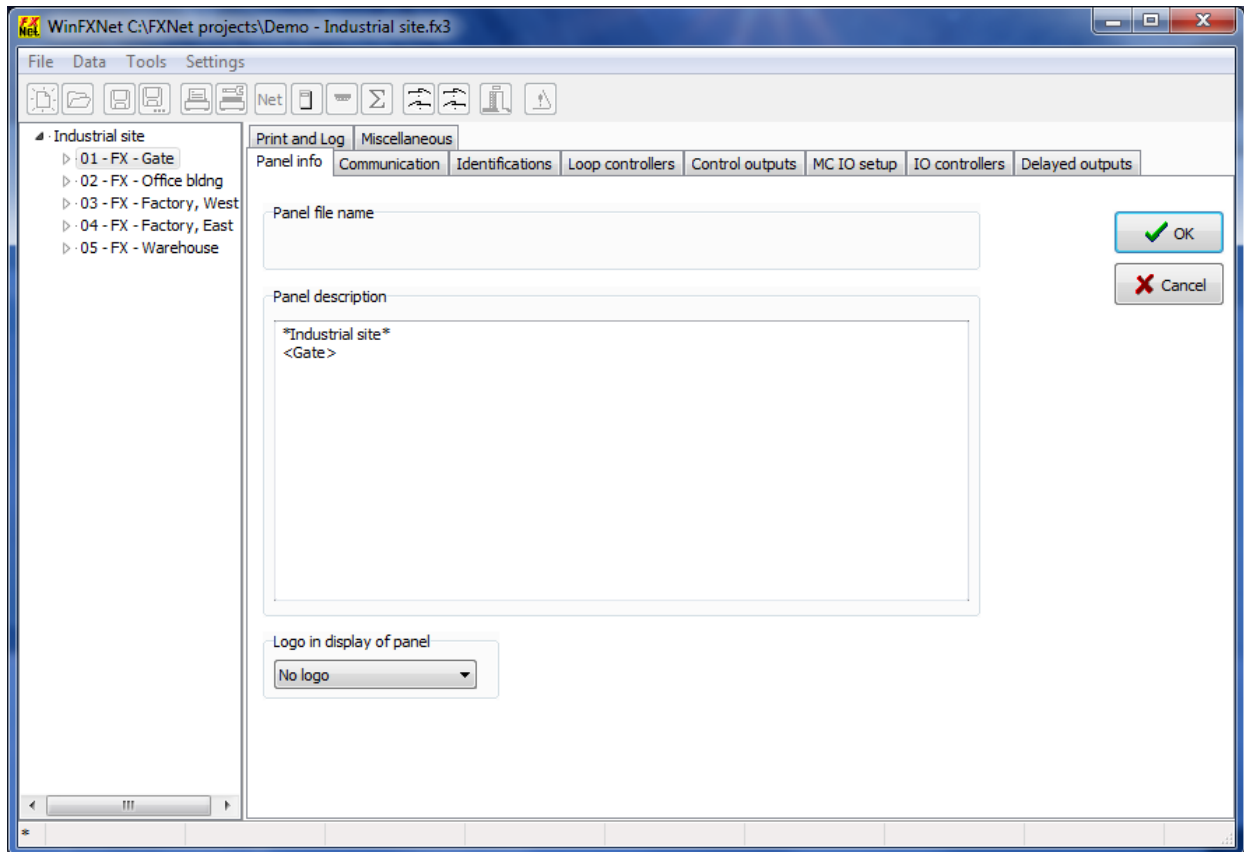
Communication page

On this page you select communication protocol for each communication port
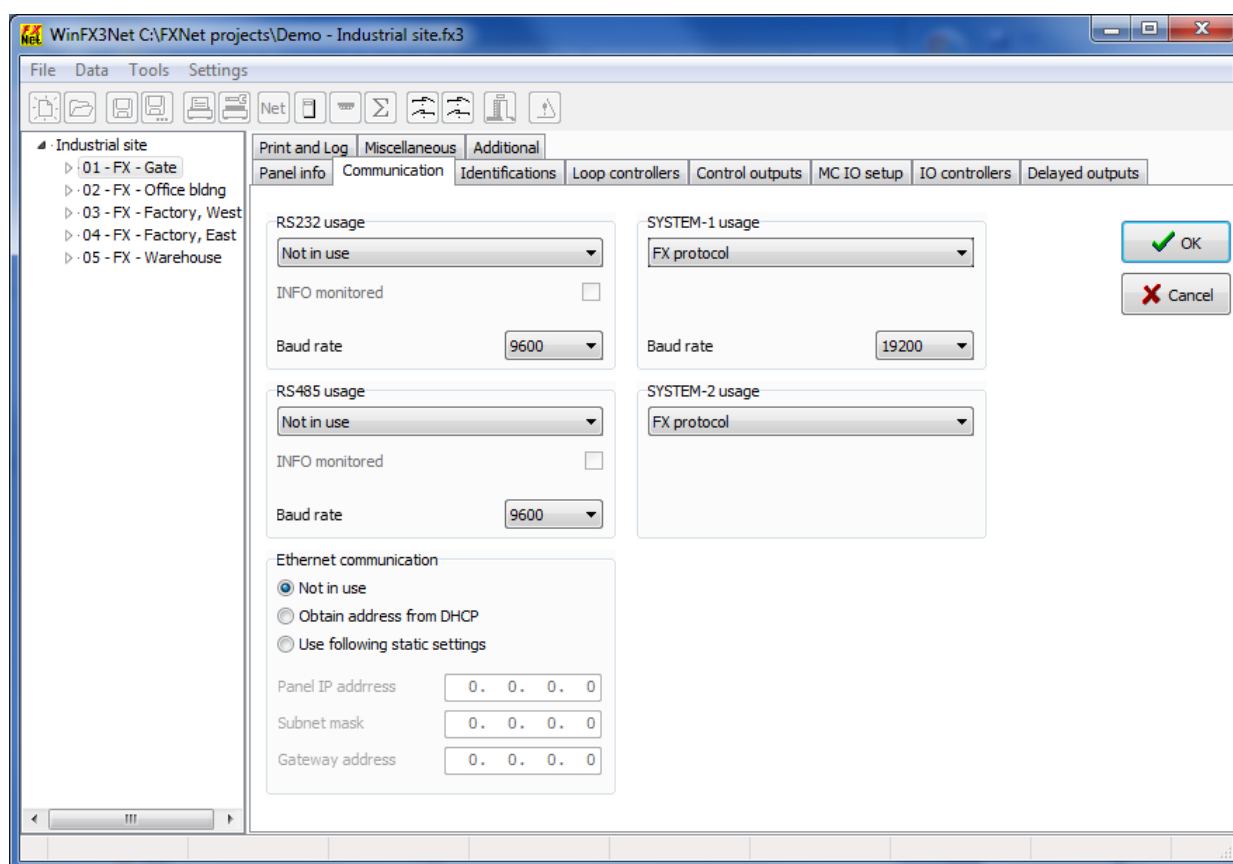
Available protocol options for the **RS232 port** (on the MC board) are:

'Not in use'	No communication will take place on the port
'Printer protocol (ASCII)'	For connecting a printer
'INFO protocol'	The INFO protocol is a proprietary communication protocol for point-to-point communication between compatible devices. The protocol sends alarms, fault warnings, disablement and re-enablement messages to an external device.

Other options for the RS232 port are:

INFO monitored	When this is checked, the panel issues a fault alarm if the communication is interrupted.
Baud rate	Available options are 1200, 2400, 4800, 9600 and 19200

Available options for the **RS485** port (on the optional SAA or SAB boards) are:

'Not used'	No communication will take place on the port
'INFO protocol'	The INFO protocol is a proprietary communication protocol for point-to-point communication between compatible devices. The protocol sends alarms, fault warnings, disablement and re-enablement messages to an external device.

Other options for the RS485 port are:

INFO monitored	When this is checked, the panel issues a fault alarm if the communication is interrupted.
Baud rate	Available options are 1200, 2400, 4800, 9600 and 19200

Available options for the **SYSTEM-1** port (on the optional SAB boards) are:

'Not used'	No communication will take place on the port
'FX protocol'	For communication in a networked FX system

Other options for the SYSTEM-1 port are:

Baud rate	Available options are 1200, 2400, 4800, 9600 and 19200 For 'FX protocol' the baud rate is fixed at 19200

Available options for the **SYSTEM-2** port (on the optional SAB boards) are:

'Not used'	No communication will take place on the port
'FX protocol'	For communication in a networked FX system

Settings for the **Ethernet (RJ-45)** port

'Not used'	The port is turned off (no power)
'Obtain address from DHCP'	The panel requests address settings from a DHCP server on the network
'Use following static settings'	The panel uses the address settings given in the entry fields: - Panel IP address - Subnet mask - Gateway address

Identifications page

On the Identifications page you specify the Panel ID, Detection Zones, Split point for Local / Shared Control Groups and Panels Visible to this panel.
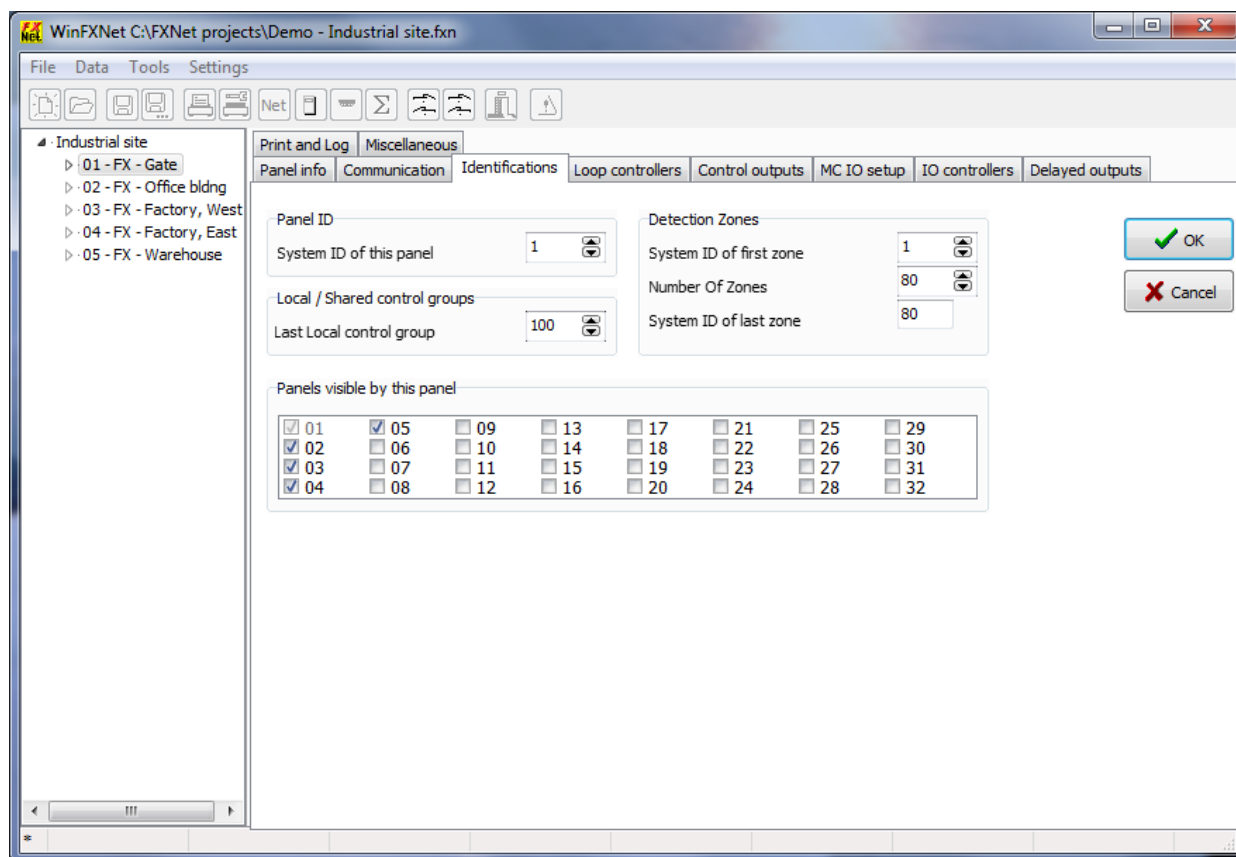
Field	Purpose
System ID of this panel	Indicates what ID (identification) the panel is assigned in communication with other panels/devices. This is 0 by definition in standalone FX panels.
System ID of first zone	The first zone of the panel. By default it is 1, and you can increase it to whatever value until 9999 – number of zones. The zones of a panel have to be consecutive.
Number of zones	This is by default 80, and you can change it to anything in the range 1 … 250
System ID of last zone	The last zone of the panel. This is calculated on basis of first zone and number of zones.
Last Local Control group	defines the split point for local and shared control groups. The default is 100 which means that control groups 1 ... 100 are local and can only be used by this panel itself. Control groups 101 ... 999 are shared over the network and can be used as control activation criteria in all seeing panels

Note!
It is an error to define the same Panel ID for two or more panels.
It is an error to define overlapping zones for two or more panels.
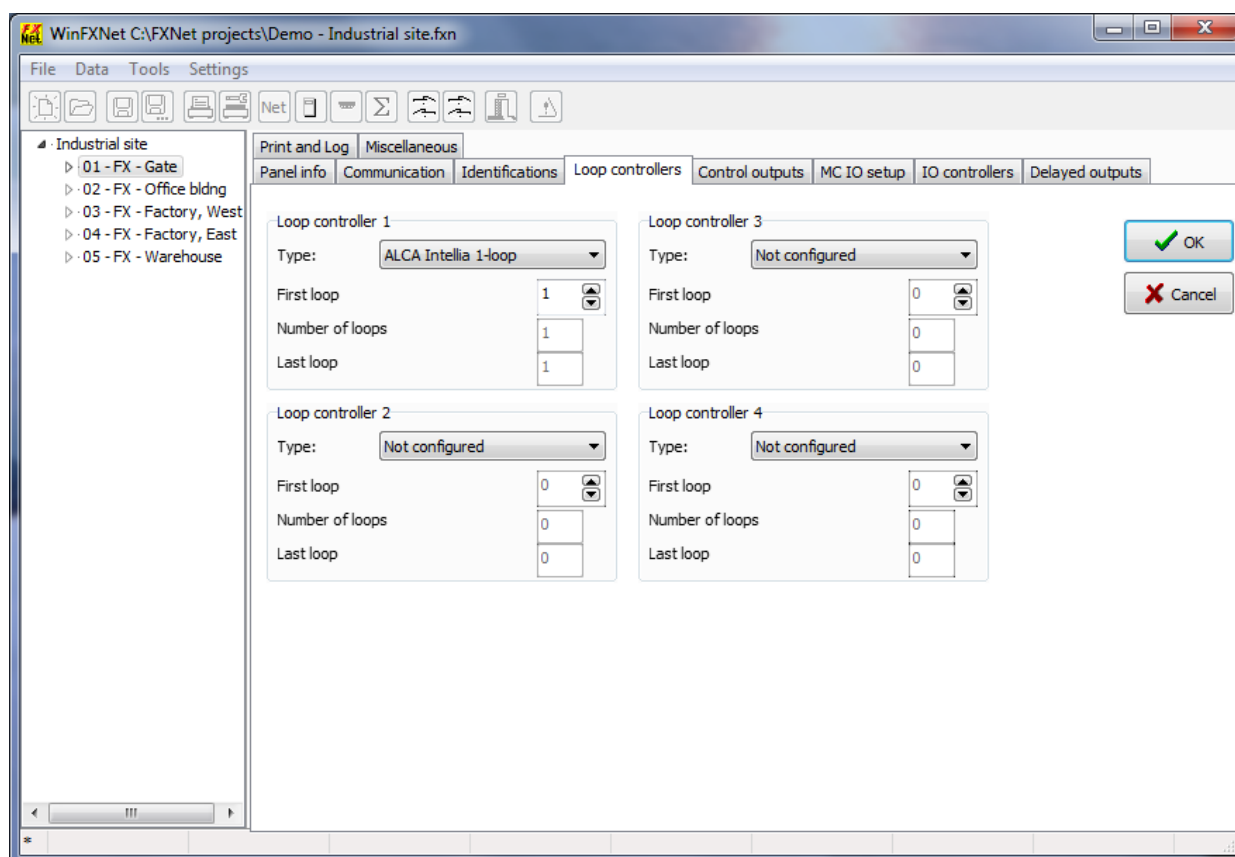
Loop Controllers page

On the 'Loop controllers' page you define the Loop Controller boards in the panel and the loop numbers.

NOTE! The loop controllers have to be defined in order and the loop numbers (identifications) have to be consecutive.
It is an error to define overlapping loop identifications for two or more panels.

Field	Purpose
Type	Available options are 'Not in use', 'LC System Sensor 2-loop', 'CLC Conventional 16 Line', ALCB Intellia 2-loop', ALCA Intellia 1-loop and SLCB Advanced 2-loop.
First loop	The identification of the first loop. This can only be set for the first LC and is restricted to a value so that the last loop of the panel is at most 255.
Number of loops	This is automatically set depending on the type of LC
Last loop	This is automatically set based on the 'First loop' and 'Number of loops' fields

Additionally, for ALCA and ALCB loop controllers if the feature is activated (see Note)

Startup delay (m.) for loop n	Startup delay in minutes. This setting may be required if wireless expander modules and wireless devices are installed. The delay gives the expanders time to search for, and establish communication with, the wireless devices.
Startup delay (m.) for loop $n + 1$	

Note. The Startup delay feature for ALCA and ALCB loops is activated from Settings - Specials in the main menu. The password to activate the feature is 'alcstartdelay'. If the feature is activated the fields are visible and enabled. If the feature is not activated the fields are shown but not enabled if a file with this setting is opened.

Changing the type of a loop controller has implications on the addresses connected to that loop controller, mainly because the devices are technically incompatible. For example, devices connected to an ALCB controller cannot work if connected to an SLCB controller. Also, since the loops in a panel must be contiguous, changing a 1-loop controller to a 2-loop controller (or vv) will change the loop numbering of subsequent loops and thus the full identification of a particular address.

Example: changing an ALCB to an ALCA
The first loop controller is changed from ALCB to ALCA and, as a consequence, the number of loops is decreased from 4 to 3. Address definitions of the original loop number 2 will be deleted.

Old Loop Controllers	Loops	New Loop Controllers	New Loops
LC1, ALCB (2 loops)	loop 1	LC1, ALCA (1 loop)	loop 1 (former loop 1)
	loop 2	LC2, ALCB (2 loops)	loop 2 (former loop 3)
LC2, ALCB (2 loops)	loop 3		loop 3 (former loop 4)
	loop 4		

(former loop 2 is deleted)

Example: changing an ALCA to an ALCB

Old Loop Controllers	Loops	New Loop Controllers	New Loops
LC1, ALCA (1 loop)	loop 1	LC1, APO_2	loop 1 (former loop 1)
LC2, ALCB (2 loops)	loop 2		loop 2 (new loop)
	loop 3	LC2, APO_2	loop 3 (former loop 2)
			loop 4 (former loop 3)

(new loop 2 inserted)

If a loop controller is changed to another and incompatible type (e.g. ALCB to SLCB), all address definitions of the loops of the controller will be deleted.

However, since version 6.4 of WinFX3Net, an LC controller can be changed to an SLCB controller keeping the address definitions and converting them to 200 series address definitions of the SLCB loop controller with the following restrictions:
- OMNI sensors are invalid device types in an SLCB loop (the type will become 'Not in use').
- If any Advanced protocol devices are added to the loop, the restriction of max. twenty 200 series devices is enforced.
- LC addresses 101…199 will get address id's of 201…299 due to the different addressing schemes.

When you change the loop controller type and address definitions will be deleted or in case of an LC to SLCB change, addresses can either be converted or deleted a verification dialog is shown:
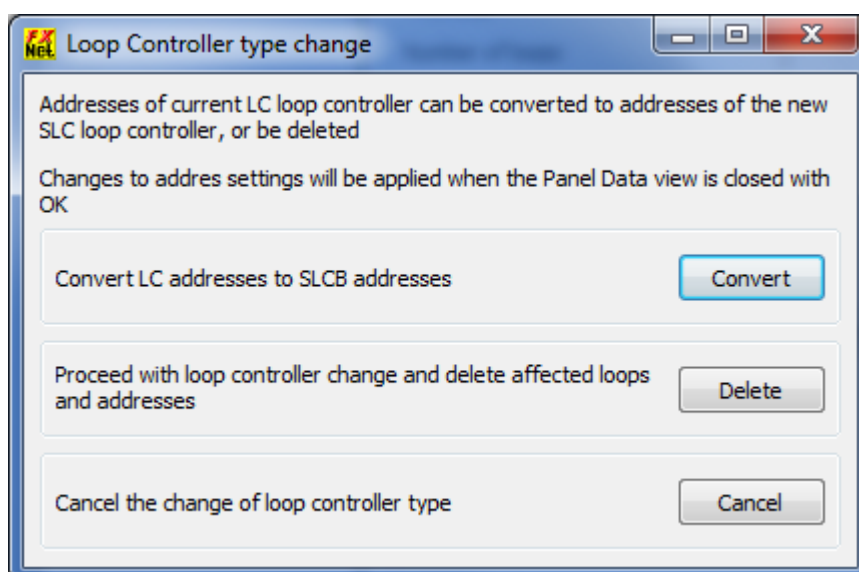
The 'Convert' button is active only when changing an LC to an SLCB

Control Outputs page

On the Control outputs page you define which alarms and events in this panel affects fire door controls.
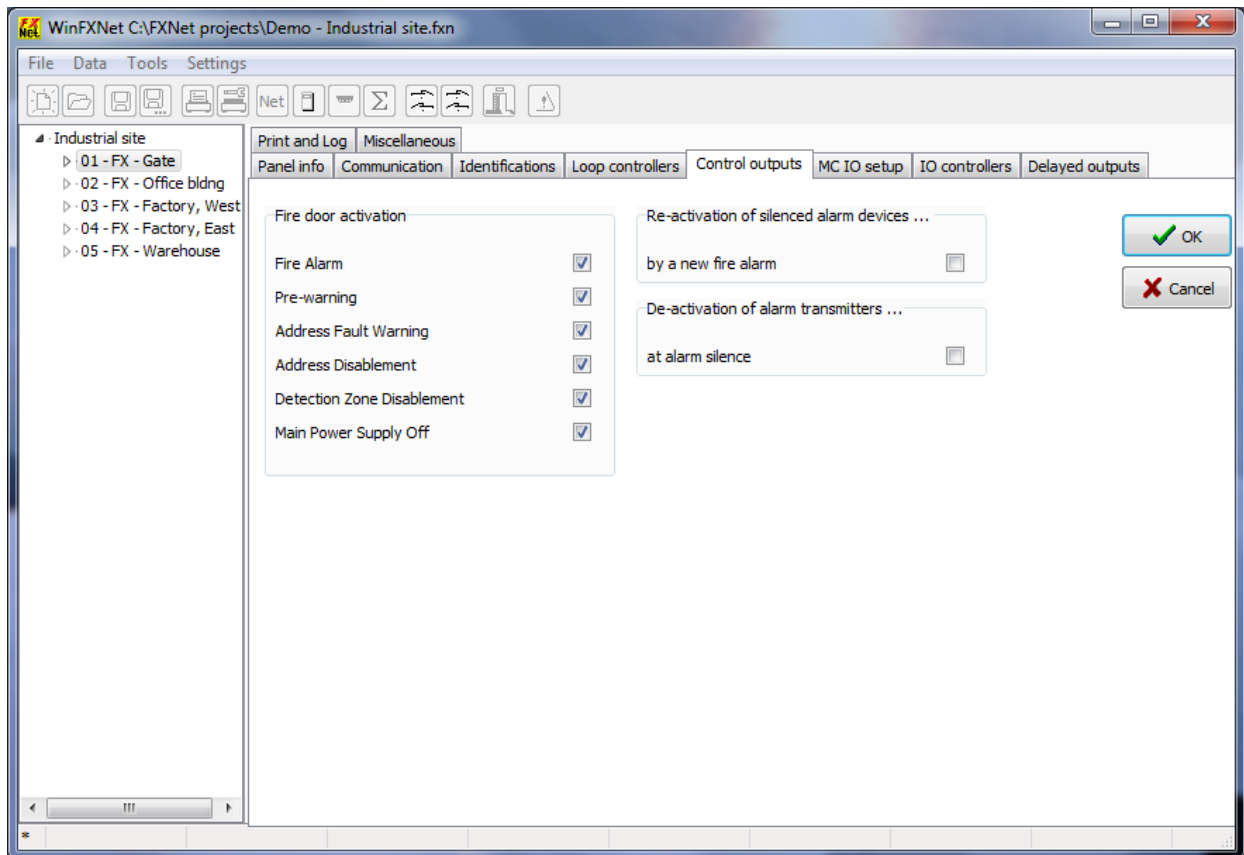
Fire door activation
Automatic fire doors, that are kept open by an electromagnet, should close when there is a fire alarm. In many applications it is also required that the fire doors should close if it cannot be guaranteed that a fire will be detected, e.g. a detector is in fault condition or is disabled.
It may also be desired that the fire doors close on a main power supply failure, to preserve battery power if the door holding magnets are supplied by the FX panel.
Select with a check mark the events that should trigger a fire door control.

Activation of silenced alarm devices
Select whether or not a new fire alarm shall re-activate alarm devices that already have been silenced before.

De-activation of alarm transmitter
The alarm transmitter is normally reset (de-activated) at alarm reset. Selecting 'at alarm silence' it will be reset at alarm silence.

MCIO Setup page

On the 'MCIO Setup' page you define the function of input signals, relay outputs and alarm device outputs located on the MC board.
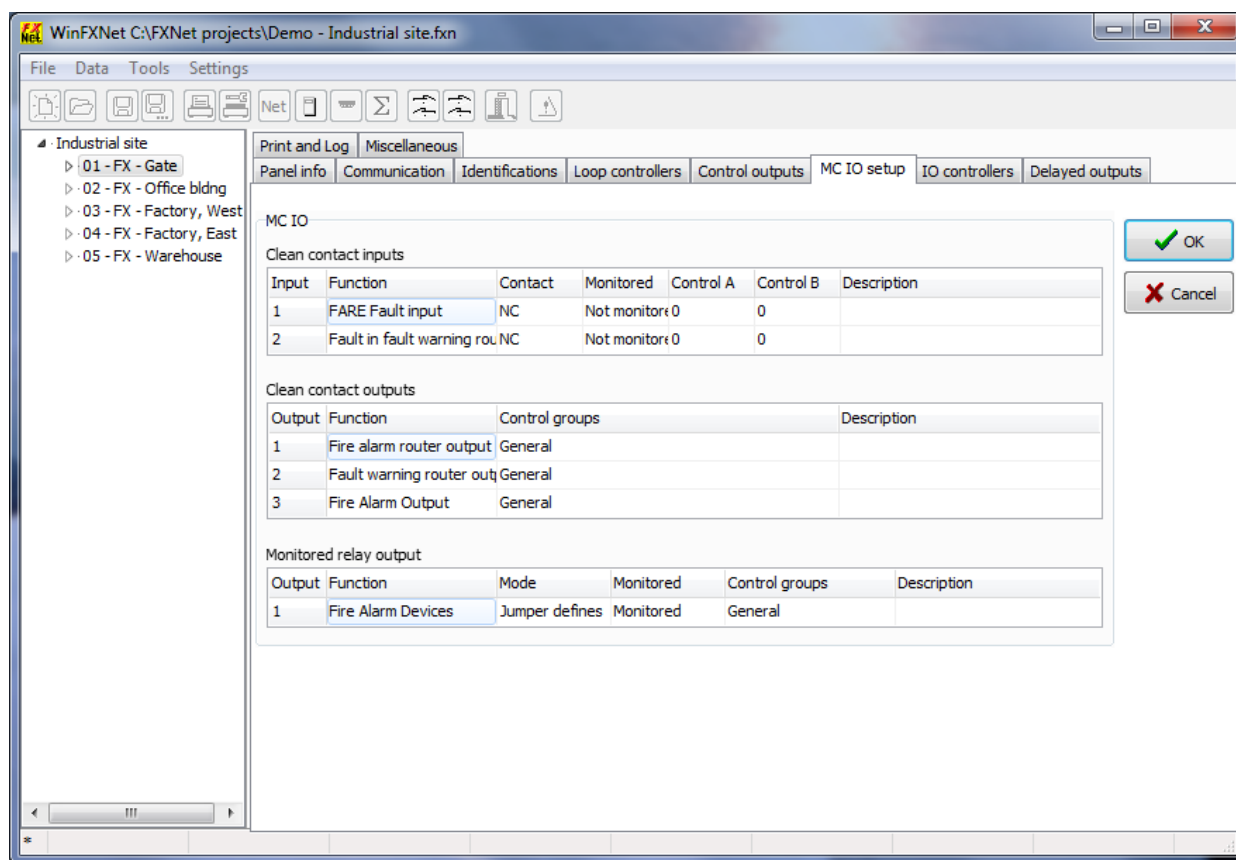

The MC board has two clean contact inputs (monitoring of voltage free contacts).

Field	Purpose
Input	Identifies the input
Function	Defines the kind of event that will be triggered by the input when activated. See chapter 0 for a list of available options.
Contact	Defines the kind of contact, either Normally Open (NO) or Normally Closed (NC)
Monitored	Defines whether or not the input should be monitored for breaks or short circuits in the cable. It should generally be set to 'Monitored'.
Control A	The first control group that the input will activate. See the FX Design Manual for a discussion on control groups and control functions.
Control B	The second control group that the input will activate. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the input.

The MC board has three clean contact outputs (relay outputs)

Field	Purpose
Output	Identifies the output
Function	Defines the kind of event that will trigger the output. See chapter 0 for a list of available options.
Control groups	The control groups that will activate this output. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the output.

The MC board has one output for alarm devices

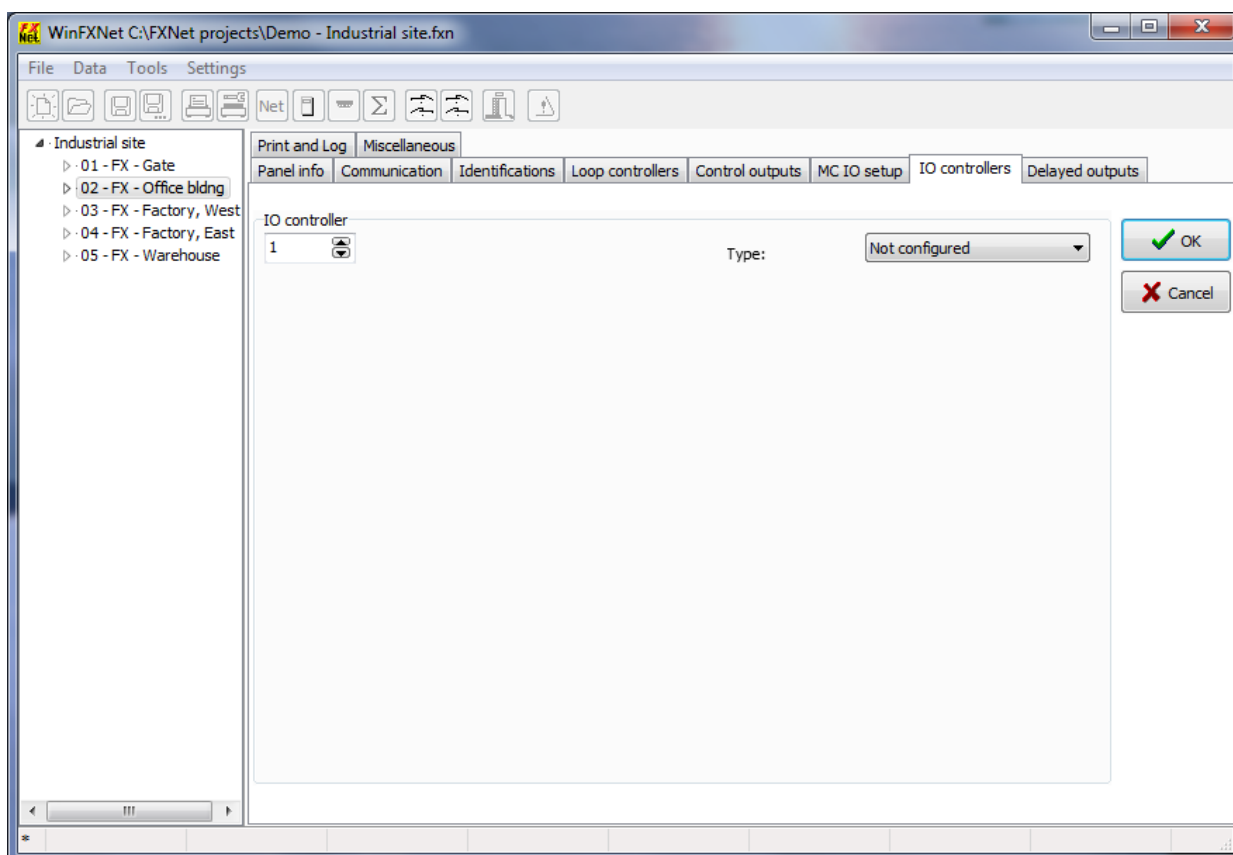| Field	Purpose
Output	Identifies the output
Function	Defines the kind of event that will trigger the output. See chapter 0 for a list of available options.
Mode	Defines how the output control is controlled. Available options are 'Jumper defines', 'Continuous', 'Pulsed' and 'Phased evacuation'.
Monitored	Defines whether or not the output should be monitored for breaks or short circuits in the cable. It should generally be set to 'Monitored'.
Control groups	The control groups that will activate this output. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the output.

IO controllers page

On the IO Controllers page you define the IO Controllers. Up to 4 controllers can be defined.
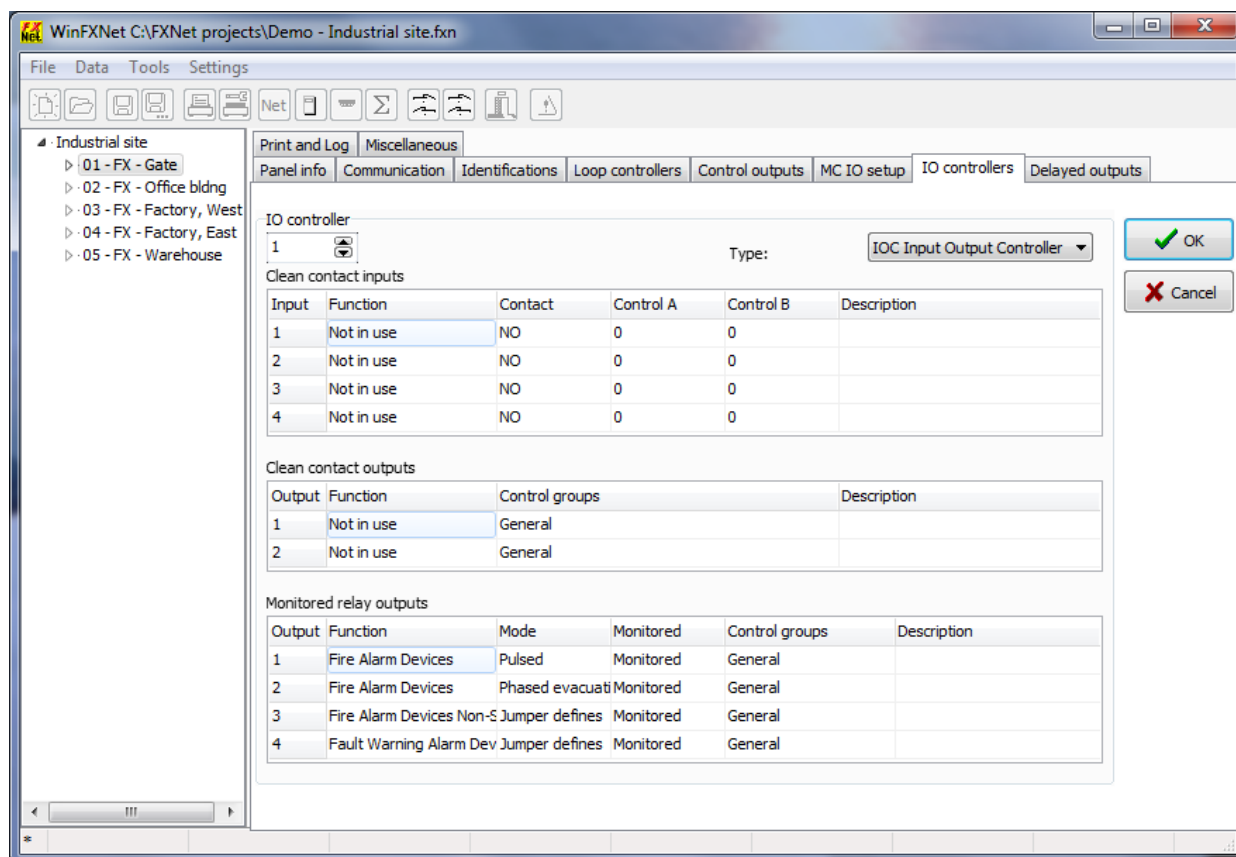

Field	Purpose
IO controller	Selects and identifies the controller board
Type	Defines the controller type. Available options are: 'Not configured', IOC Input and Output Controller' and 'OCA Relay Output Controller'

IOC Input and Output Controller

For IO controller of type 'IOC Input and Output Controller' you define the function of input signals, relay outputs and alarm device outputs located on an IOC board.

Each IOC board has four Clean Contact Inputs, two Clean Contact Outputs and four Alarm Devices Outputs

The IOC board has four clean contact inputs (monitoring of voltage free contacts).

Field	Purpose
Input	Identifies the input
Function	Defines the kind of event that will be triggered by the input when activated. See chapter 0 for a list of available options.
Contact	Defines the kind of contact, either Normally Open (NO) or Normally Closed (NC)
Control A	The first control group that the input will activate. See the FX Design Manual for a discussion on control groups and control functions.
Control B	The second control group that the input will activate. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the input.

The IOC board has two clean contact outputs (relay outputs)

Field	Purpose
Output	Identifies the output
Function	Defines the kind of event that will trigger the output. See chapter 0 for a list of available options.
Control groups	The control groups that will activate this output. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the output.

The IOC board has four outputs for alarm devices

Field	Purpose
Output	Identifies the output
Function	Defines the kind of event that will trigger the output. See chapter 0 for a list of available options.
Mode	Defines how the output control is controlled. Available options are 'Jumper defines', 'Continuous', 'Pulsed' and 'Phased evacuation'
Monitored	Defines whether or not the output should be monitored for breaks or short circuits in the cable. It should generally be set to 'Monitored'.
Control groups	The control groups that will activate this output. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the output.

OCA Relay Output Controller

For IO controller of type 'OCA Relay Output Controller' you define the function of relay outputs located on an OCA board.

Each OCA board has sixteen Clean Contact Outputs.

The OCA board has sixteen clean contact outputs (relay outputs)

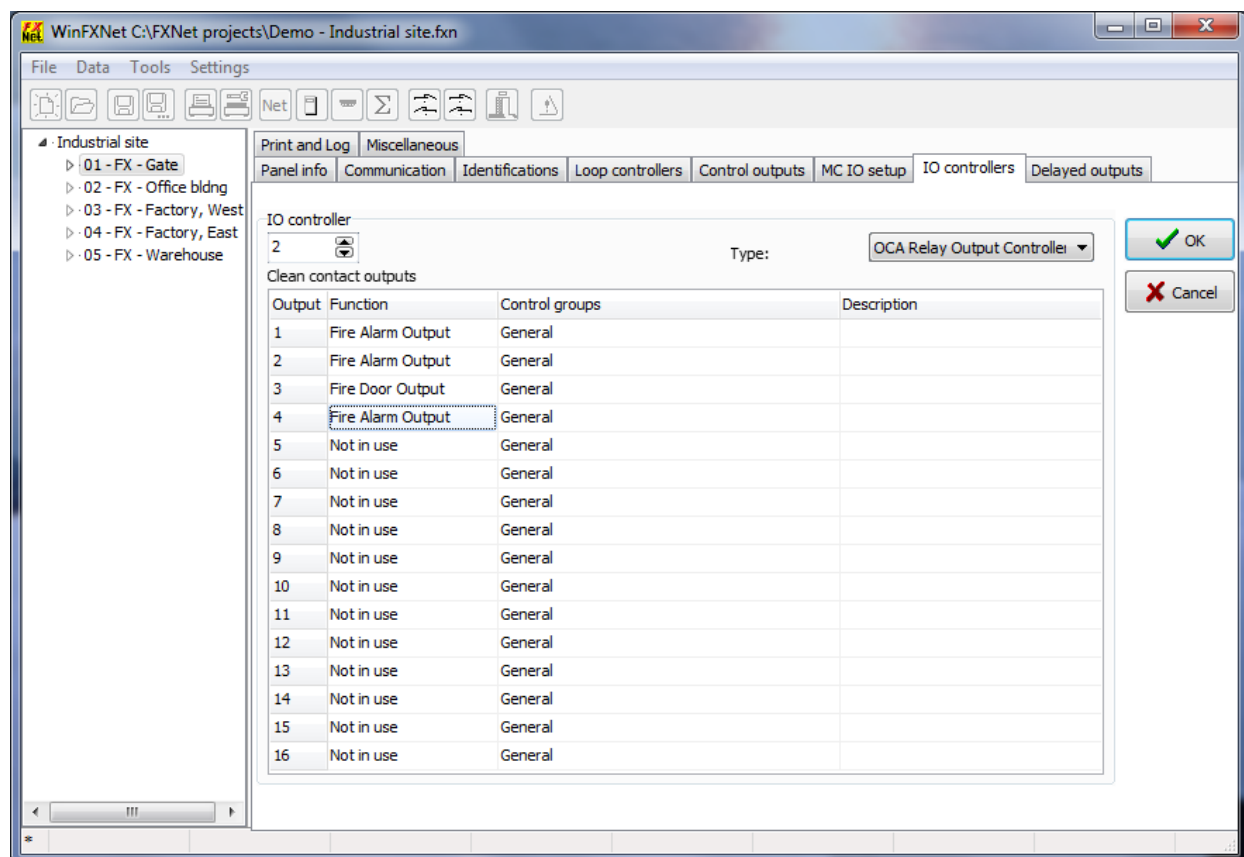| Field	Purpose
Output	Identifies the output
Function	Defines the kind of event that will be triggered by the input when activated. See chapter 0 for a list below for available options.
Control groups	The control groups that will activate this output. See the FX Design Manual for a discussion on control groups and control functions.
Description	Any text that describes the output.

MC and IOC Clean Contact Input functions

'Not in use'	The input is not in use and has no effect
'Fault warning input'	Activates a fault warning condition
'Fault in fire alarm router'	Activates a fault warning condition indicating 'Fault in fire alarm router'
'Fault in fault warning router'	Activates a fault warning condition indicating 'Fault in fault warning router'
'Maintenance warning input'	Activates a maintenance warning indication
'Technical alarm input'	Activates a technical alarm indication, including the buzzer
'Silent technical alarm input'	Activates a technical alarm indication, excluding the buzzer
'Local Evacuation input'	Activates all fire alarm devices of this panel
'Evacuation input'	Activates all fire alarm devices of this panel and all visible panels
'Local Day Mode activation input'	Activates the day mode function for this panel
'Local Delayed Alarm enable input'	Activates the delayed alarm function for this panel
'Local Day Mode and Delayed Alarm enable'	Activates both day mode and delayed alarm for this panel
'Day Mode activation input'	Activates the day mode function for this panel and all visible panels
'Delayed Alarm enable input'	Activates the delayed alarm function for this panel and all visible panels
'Day Mode and Delayed Alarm enable'	Activates both day mode and delayed alarm for this panel and all visible panels
'Start delay T2 for delayed alarm'	Starts the delay time T2 in delayed alarm condition
'Delayed alarm reset input'	Resets the delayed alarm condition
'General Silence input'	Silences the currently highest priority alarm condition
'General Reset input'	Resets the currently highest priority alarm condition
'Local fire alarm device mute input'	Mutes (disables) temporarily fire alarm devices of this panel for the time of a Voice Evacuation message being announced
'Fire alarm device mute input'	Mutes (disables) temporarily fire alarm devices of all visible panels for the time of a Voice Evacuation message being announced
'Voice evacuation fault input'	Activates a fault warning condition indicating 'Fault in voice evacuation system'
'Extinguisher fault input'	Activates a fault warning condition indicating 'Fault in extinguisher'
'Extinguisher activated input'	Activates the indication 'Extinguisher activated'
'Smoke ventilation activated input'	Activates the indication 'Smoke ventilation activated'
'Activation of customer LED 1'	Activates the auxiliary led marked as 'Customer LED 1'
'Activation of customer LED 2'	Activates the auxiliary led marked as 'Customer LED 2'
'Internal logic input'	Provides a signal to the built-in control logic
'External logic input'	Provides a signal to an external control logic

MC, IOC and OCA Clean Contact Output functions

'Not in use'	The output is not in use
'Fire alarm devices'	Is activated in fire alarm condition
'Fire alarm devices Non-Sil.'	Is activated in fire alarm condition, but is not deactivated at a press of the 'Silence' button. Use this option for e.g. beacons
'Fire alarm devices Lev.1 Sil.'	Is activated in fire alarm condition, and can be silenced with the 'Silence' button on access level 1.
'Fault warning devices'	Is activated by a fault warning condition
'Fire alarm output'	Is activated in fire alarm condition
'Voice evacuation activate output'	Is activated in fire alarm condition
'Voice evacuation test output'	Is activated by fire alarm when the panel is in test condition
'Fire alarm output'	Is activated in fire alarm condition
'Delayed fire alarm output'	Is activated when the panel is in a delayed fire alarm condition

| 'Delayed fire alarm T2 output'	Is activated when timer T2 in the delayed alarm function is running
'Fire door output'	Is activated when any of the selected conditions for fire door control is active
'Extinguisher control output'	Is activated in fire alarm condition
'Fire alarm router output'	Is activated in fire alarm condition
'Fire alarm router LED output'	Is activated when the indicator 'Fire alarm router activated' in the panel is lit
'Fault warning router output'	Is activated in fault warning condition
'Prewarning output'	Is activated in Prewarning condition
'Fault warning output'	Is activated in fault warning condition
'Maintenance warning output'	Is activated in maintenance warning condition
'Technical alarm output'	Is activated in technical alarm condition
'General reset output'	Is activated for 30 seconds when a reset sequence (of any alarm type) is started
'Disablement output'	Is activated if anything in the panel is disabled
'Access level output'	Is activated when the panel is in access level 2
'Internal logic output'	Is activated by a command from the internal control logic
'External logic output'	Is activated by a command from the external control logic

MC and IOC Monitored Relay Output functions

These were previously called Alarm Device Outputs (ADO) but are renamed to Monitored Relay Outputs since version 3.4 of WinFXNet.

The selectable functions are the same as for Clean Contact Outputs.

Delayed outputs page

On the 'Delayed outputs' page you define the delay times, what control outputs to delay and termination of the delay as well as how the conditions should be displayed.

The term 'Delayed alarm' refers to an alarm from a detector for which its alarm mode is configured to be 'Delayed output'. The purpose is to give personnel at the site time to investigate whether the alarm condition is real and not a false alarm signal. If the personnel realize that the alarm condition is due to a false alarm signal, they can reset the panel before fire brigade is called to the site and / or bells and whistles are activated
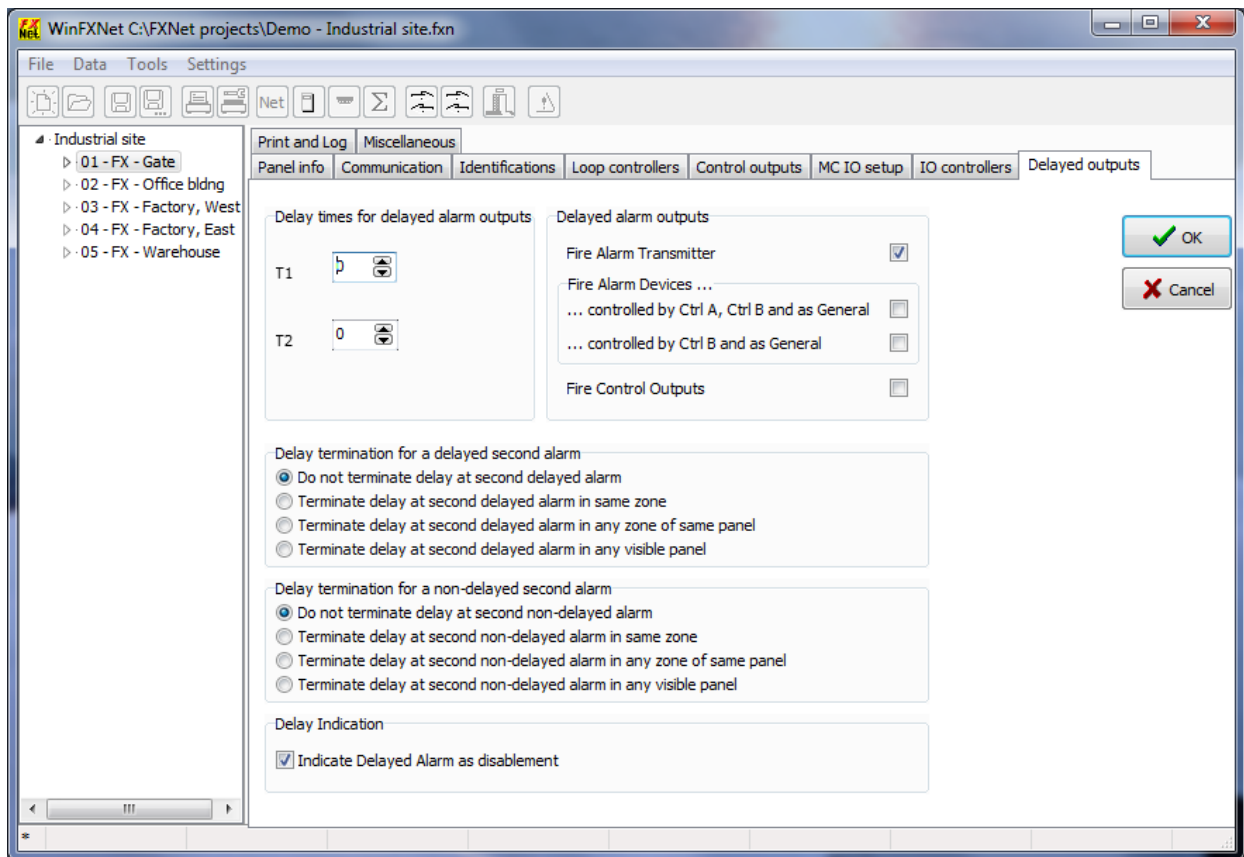
In '**Delay times for delayed alarm outputs**' you define the two delay times involved in the function.
- T1 defines the 'reaction time' within which the operator must react to the alarm condition.
- T2 defines the investigation time within which the operator must investigate the cause of the alarm and reset the alarm if it is not a real fire.

T1 can be set in 10 second increments up to a maximum of 300 seconds (five minutes).
T2 can be set in 10 second increments up to a maximum of 600 seconds (ten minutes)
The sum of T1 and T2 can not exceed 600 seconds (ten minutes)

In '**Delayed alarm outputs**' you define which outputs are affected by the delay. There are three main items that can be delayed: Fire alarm transmitter, Fire alarm devices and Fire control outputs
The Fire alarm transmitter is usually connected to the fire brigade or an alarm receiving station and is the most obvious to delay, therefore it is selected as default.
For fire alarm devices there are two options: 'Controlled by Ctrl A, Ctrl B and as General', meaning effectively that all alarm devices are delayed, and 'Controlled by Ctrl B and as General', meaning effectively that alarm devices controlled by Ctrl A are not delayed, while all others are.
Fire control outputs includes all other control outputs that are activated by a fire alarm condition.

Delays can be terminated if the system recognizes another alarm signal (from another detector). Delay termination can be separately defined for situations
- where the second alarm is from a detector with alarm mode set to delayed output
- where the second alarm is from a detector with alarm mode not set to delayed output

In '**Delay termination for a delayed second alarm**' you define whether the delay should not be terminated or that it should be terminated by another delayed alarm initiated
- in the same zone as the first one
- in any zone of the same panel as the first one
- in any visible panel

In '**Delay termination for a non-delayed second alarm**' you define whether the delay should not be terminated or that it should be terminated by a non-delayed alarm initiated
- in the same zone as the first one
- in any zone of the same panel as the first one
- in any visible panel

In '**Delay indication**' you define whether or not the activation of the delayed alarm function should be displayed as a disablement or not. The EN54 standard requires that the delay function should be indicted as a 'Disablement of the immediate activation of outputs', but this may not be desirable in some applications. This requirement in the EN54 standard may be cancelled in the next publication.

Print and Log page

On the 'Print and log' page you define what events should be printed in real time (if a printer is connected) and what events should be recorded in the event log
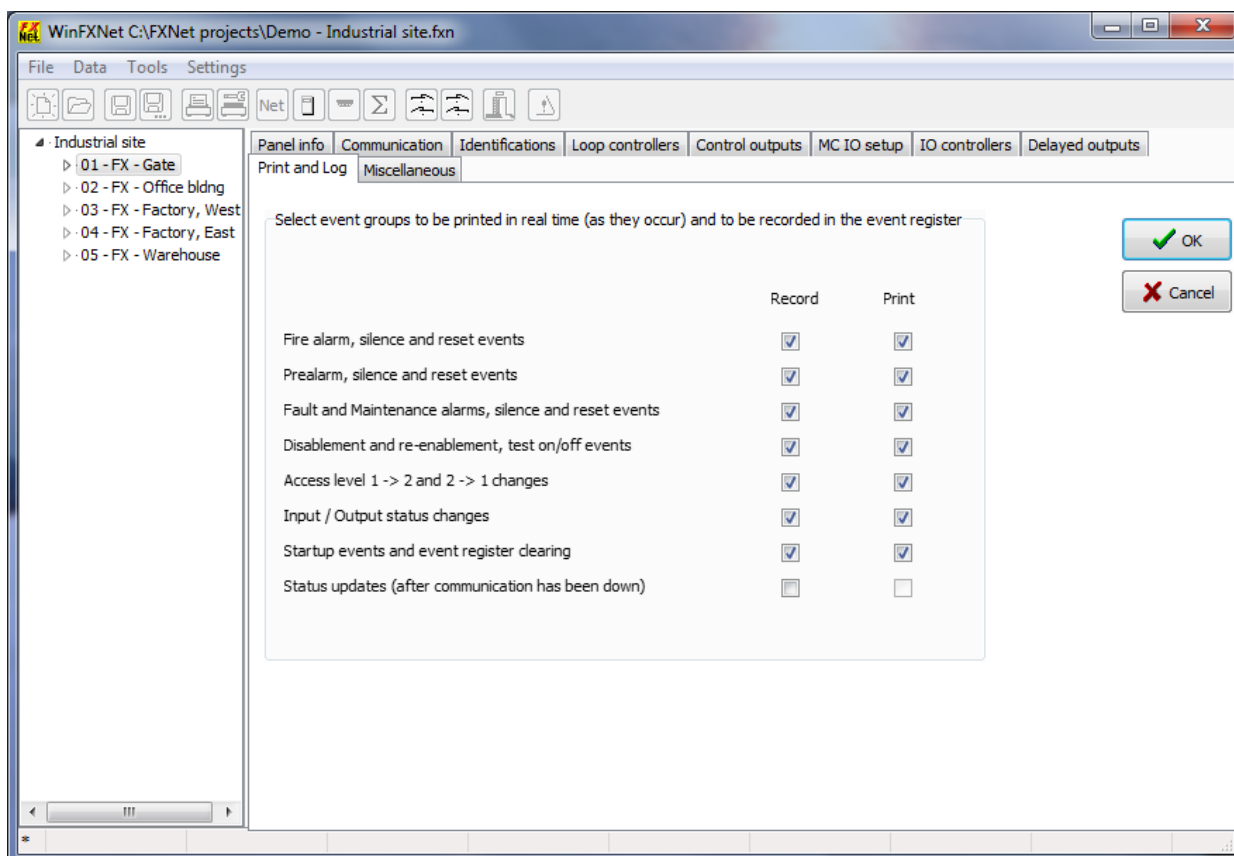
Note that an event group has to be marked for logging to be able to select it for printing

Miscellaneous page

On the 'Miscellaneous' page you define the language to display, service codes, maximum time of zone disablement, whether to use daylight saving time (summer time) and how to display the alarms.
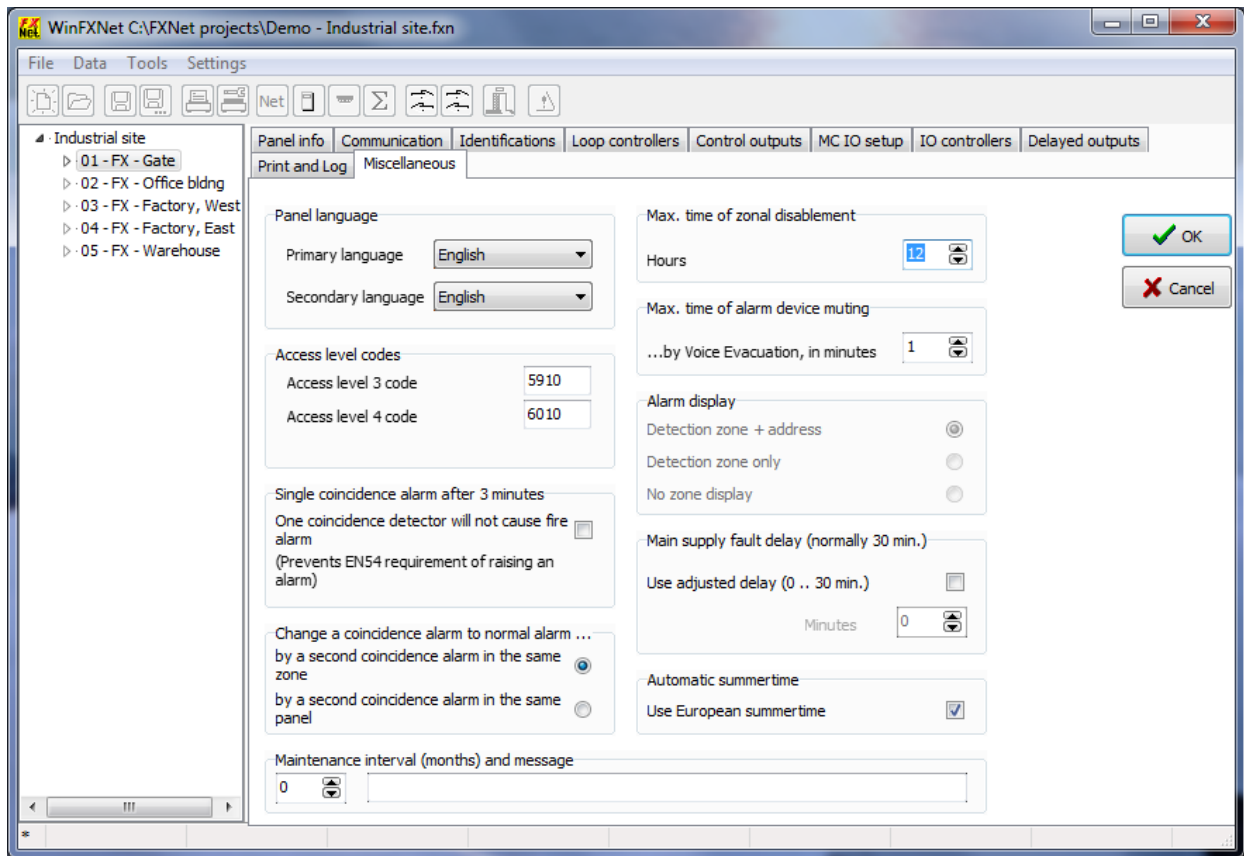
The 'Primary language' and 'Secondary language' define which languages should be used by the panel. If the selection is different for these two, the operator may switch between the languages via the menu. If the selections are the same, then the language switching menu item is not displayed in the panel. Separately from this language switching, the panel menu enables to select any of the built-in languages, but this selection reverts to the configured primary language if the panel is restarted.

In the 'Access level codes' field you can define the password code for
- access level three, which enables setting the panel in configuration mode and some maintenance information to be displayed
- access level four, which enables resetting the alarm counter

In the 'Single coincidence alarm after 3 minutes' field you can choose what should happen if a single coincidence detector is constantly in alarm for longer than three minutes. The EN54 standard requires that a normal alarm condition is raised, and that is the default function of the FXNet panel since September 2009. If, for some reason, a constant coincidence prewarning should not raise a normal fire alarm condition after three minutes, you can checkmark this option.

In the 'Change a coincidence alarm to normal alarm' field you can select when the prewarning indicated by an alarm from a detector set with 'Coincidence' shall be changed into a normal fire alarm. Available options are by a second coincidence alarm in the same **zone** or the same **panel**.

In the 'Max. time of zone disablement' field you define for how long a zone disablement, activated by an addressable monitor module configured as 'Zone disablement, at most should be active. This definition is a safety precaution for an eventual failure of the device connected to the monitor module. If this time elapses a fault indication will be shown on the panel and the zone will be re-enabled.

In the 'Max. time of alarm device muting' field you define for how long muting of alarm devices at most can be activated. This definition is a safety precaution for an eventual failure of the Voice Evacuation system that

controls muting of alarm devices. If time elapses a fault indication will be shown on the panel and the muting of alarm devices will be cancelled.

The '**Alarm display**' field is disabled by default and the alarm display setting is 'Detection zone + address'. 'Detection zone only' is a reservation for future and is permanently disabled. Selection of 'No zone display' can be activated from main menu item 'Settings - Special settings' by entering a password. Please ask technical support for the password if you think you need it.

In the '**Main supply fault delay**' field you can change the default delay time for the fault indication of a mains fault. The EN54 standard allows a delay of 30 minutes to prevent unnecessary fault alarms for short power outages.

In the '**Automatic summertime**' field you can select whether or not automatic summertime shall be used by the panel. Currently only the European summertime scheme is selectable.

In the '**Maintenance interval and message**' field you can define how often (in months) the panel should indicate a maintenance warning, and the message that the panel will display in this warning. 0 means no indication and other valid values are 1 ... 36 months. The message can be up to 60 characters long.

Closing the General Panel Data window

Press the OK button to keep any changes you have made to the General Panel Data.

Press the Cancel button to cancel any changes you have made.

Address and Text data

There are four main types of loop controller boards for the FXNet panels: ALC, SLC, LC and CLC. They are available in following versions and provide address capacities as follows:

Type	Number of loops	Address ranges	Device families	Notes
ALCA	1	001 ... 126	Intellia Discovery XP95 S60	(note1) (note1) (note1)
ALCB	2			
SLCB	2	001 ... 159 201 ... 359	Advanced series 200 series	(note2)
LC	2	001 ... 099 101 ... 199	200 series	(note2)
CLC	(1)	001 ... 016	Conventional detectors and manual call points	(note3)

Note1.   Configuration may be restricted by licensing policy.
Note2.   The same addresses in the low range and the high range (e.g. 005 and 205) can not be both detectors or both IO modules.
Note3.   The CLC loop is a logical (not real) loop. The 1 ... 16 addresses are the actual detection circuits, to which the detectors and manual call points are connected.

There is more information regarding limitations of number of devices totally per panel and per loop in the FXNet Planning Instructions.

Select 'Data' – 'Address and Text Data' from the menu or press the [button] button on the tool bar to open the 'Address and Text Data' form.

The address table shows the addresses of one loop at a time. The height of the table and the available columns changes according to the type of the selected loop.

The controls above the address table are:

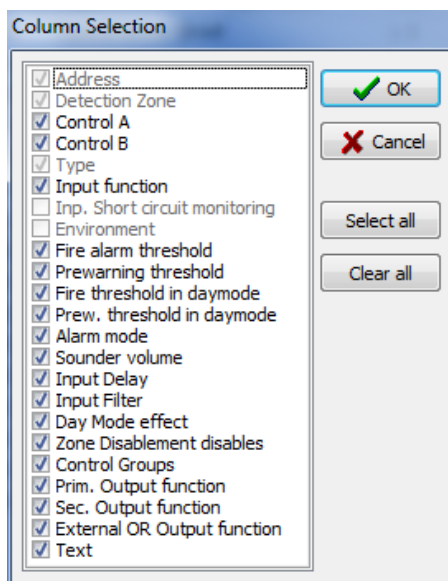| Control	Description
Loop 2	Loop selection control. All changes you make to a loop will be preserved in temporary memory when you switch from one loop to another.
Reset Columns	To reset column widths. Note that this does not change non-visible columns to visible
Select Columns	To select the visible columns. Column selection is not possible for the CLC table
Range Fill	To fill in or to change settings for a range of addresses in a loop.
✓ OK	To accept the changes made and to close the address data table
✗ Cancel	To cancel all changes made and to close the address data table

Address table columns

The table is different depending on the type of loop controller (ALC, SLC, LC or CLC) that handles the selected loop. The setup of the table changes with the loop type when you change the loop.
The 'Address and Text Data' window is initially opened in a contracted format with the most important columns visible. The visible fields allow you to change the zone assignment, the physical type and the text of an address. The ALC, SLC and LC address tables show also the columns for Input function and Output function by default

Selecting columns in the ALC, SLC and the LC address tables

Column Selection

- ☑ Address
- ☑ Detection Zone
- ☑ Control A
- ☑ Control B
- ☑ Type
- ☑ Input function
- ☐ Inp. Short circuit monitoring
- ☐ Environment
- ☑ Fire alarm threshold
- ☑ Prewarning threshold
- ☑ Fire threshold in daymode
- ☑ Prew. threshold in daymode
- ☑ Alarm mode
- ☑ Sounder volume
- ☑ Input Delay
- ☑ Input Filter
- ☑ Day Mode effect
- ☑ Zone Disablement disables
- ☑ Control Groups
- ☑ Prim. Output function
- ☑ Sec. Output function
- ☑ External OR Output function
- ☑ Text

✓ OK

✗ Cancel

Select all

Clear all

Press OK to accept the current selection

Press Cancel to cancel the changes

Press Select All to select all columns

Press Clear All to deselect all columns.
Note! 'Address', 'Detection Zone' and 'Type' cannot be deselected.
Note! 'Inp. Short circuit monitoring' and 'Environment' can be selected only for SLC address tables.
Note! 'Sounder volume' and 'Sec. Output function' can only be selected for ALC loops.

ALC, SLC and LC loops: Address table

The column headers are abbreviated to conserve space and have the following meanings:

Address	The address of a device connected to the loop
D-Zone	Detection zone. All addresses must belong to one, and only one, detection zone. The range of available detection zones for the panel is defined in the general panel data – identifications section.
Ctrl A	Control A. The first control group to be activated by an event in this address
Ctrl B	Control B. The second control group to be activated by an event in this address
Type	The type of the device
Input funct.	To define which function to activate for switch monitors and IO modules.
ScMon	Short circuit monitoring of input modules. Note! Only for SLC loop input modules.
Fire	Fire alarm threshold
Prew	Prewarning threshold
D-Fire	Daytime Fire alarm threshold
D-Prew	Daytime Prewarning threshold
Mode	Alarm mode, or sounder mode for alarm device outputs
Sndr Vol	Sounder volume for alarm devices that support volume setting. Only ALC loops.
InDel	Input delay
InFilt	Input filter
DayM	Day mode effect on the address
ZDis	Whether or not the address will be disabled by a zone disablement
Ctrl Groups	Control groups that will affect the output of the address
Output funct.	To define which function the output of the address has.
Output 2 funct.	To define which function the secondary output of the address has. Only ALC loops.
ExtOr	To define that the output is activated by an External Logic event in addition to the event type corresponding to the output function
Text	The text that is associated with the address and displayed in the different alarm conditions as well as when scrolling through the addresses

CLC loops: Address table
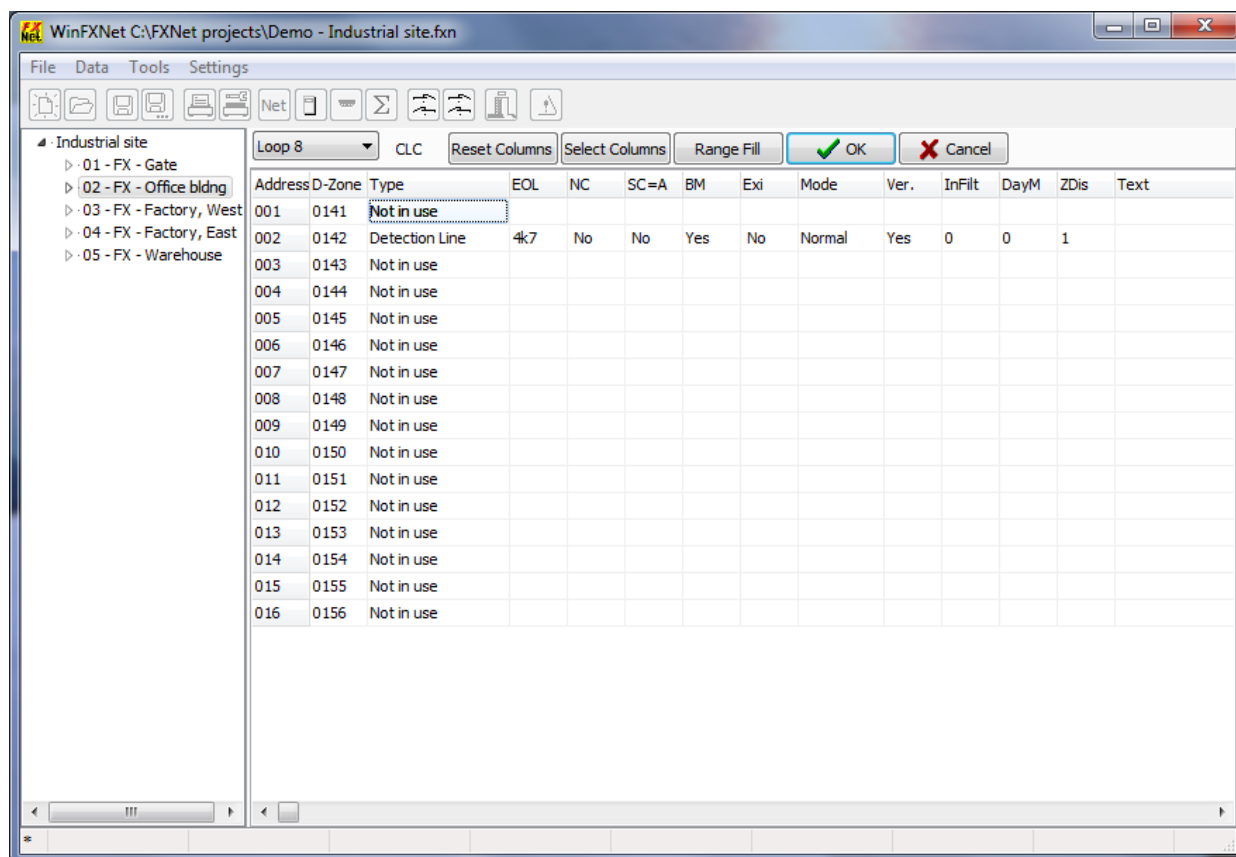
Column	Comments
Address	Conventional line. Values 1 .. 16, denotes the conventional line (or loop)
D-Zone	Detection zone. All conventional lines must belong to one, and only one, detection zone. The range of available detection zones for the panel is defined in the general panel data – identifications section
Ctrl A	Control A. The first control group to be activated by an event in this address
Ctrl B	Control B. The second control group to be activated by an event in this address
Type	Values: Not in use, Conventional line
EOL	EOL resistor, values: 4k7, 2k7
NC	Normally closed circuit, values: No, Yes
SC-A	Short Circuit is alarm, values: No, Yes
BM	Break monitored, values: No, Yes
Exi	Ex area, values: No, Yes
Mode	Alarm mode
Ver.	Alarm verification, values: No, Yes
InFilt	Input filter, default is 2
DayM	Values: No effect, Disabled
ZDis	Whether or not the conventional line will be disabled by a zone disablement
Text	The text that is associated with the conventional line and displayed in the different alarm conditions as well as when scrolling through the addresses

Changing the detection zone

The D-Zone column shows the zone to which the address is assigned. The default zone numbers are depending on the entries for 'First Zone' and 'Last Zone' (see 0).
To change the zone assignment, simply type in a new number in the field. A number which is not in the range First Zone ... Last Zone will not be accepted when you press the OK button to exit the window.

Type selection

When you **right-click** with the mouse in the Type column, a menu of available types is displayed. You can select a type with the mouse pointer and a left-click, or you can select the type by typing the short-cut key. You can also use the short-cut keys even if the menu is not visible.

Some menu entries have submenus. In this case the short-cut keys are used in succession: first to select the main type and then to select the subtype.
For example, to specify a manual call point in a LC loop, you would press 5 and 1.

ALC loops: Device types

Device type popup menu	Comments
0 – Not in use	
1 – Ionisation sensor	
2 – Optical sensor	
3 – Thermal sensor	
4 – High temperature sensor	
5 – Multicriteria	
6 – CO sensor	
P – CO-Heat sensor	
7 – Beam detector	
8 – Flame detector	
9 – Any Type	Some device has to be installed.
O – Any Type (virtual)	Nothing has to be installed. Can be set in alarm condition only through alarm test or through the INFO communication protocol.
A – Conventional Zone Module	
B – Manual call point	
C – Switch mon. w. Interrupt	
D – Switch monitor	
J – IO module	
L – Addressable sounder	
M – Sounder controller module	
N – Beacon	
R – Sounder Beacon	

Note! Some items have a protocol selection submenu if your license file allows this.

ALC loops: Conventional zone module input functions

Conventional zone module input functions	Comments
0 – Conventional Zone	
1 – Conventional beam detector	
2 – Wireless Expander	

ALC loops: Input functions

Input function popup menu	Action on activation
0 – Not In Use	None
1 – Manual Call Point	Fire alarm
2 – Reserved	
3 – Conv. Heat Detector	Fire alarm

4 – Fire Alarm Input	Fire alarm
5 – Prealarm Input	Prewarning
6 – Fault warning Input	Fault warning
7 – Maintenance Input	Maintenance warning
8 – Technical Alarm Input	Technical alarm
9 – Silent Tech Alarm Input	Technical alarm
Q – Local Evacuation Input	Activates all alarm devices of this panel
A – Evacuation Input	Activates all alarm devices of all visible panels
B – Zone Disablement Input	Disables the zone to which the module is configured
R – Local Day Mode Activation Input	Sets this panel in day mode
S – Local Delayed Alarm Enable Input	Enables the delayed alarm function of this panel
T – Local Day Mode and Delayed Alarm Enable Input	Sets this panel in day mode and enables the delayed alarm function
C – Day Mode Activation Input	Sets all visible panels in day mode
D – Delayed Alarm Enable Input	Enables the delayed alarm function of all visible panels
E – Day Mode and Delayed Alarm Enable Input	Sets all visible panels in day mode and enables the delayed alarm function
F – Delayed Alarm Zonal Silence	Silences a delayed alarm in the same zone as the monitor module
G – Delayed Alarm Zonal Reset	Resets a delayed alarm in the same zone as the monitor module
H – General Silence Input	Silences the alarm condition of all visible panels
I – General Reset Input	Resets the alarm condition of all visible panels
U – Local Fire Alarm Devices Mute Input	Mutes alarm devices of this panel for the time a Voice evacuation message is announced
V – Fire Alarm Devices Mute Input	Mutes alarm devices of all visible panels for the time a Voice evacuation message is announced
W – Voice Evacuation Fault Input	Activates a fault condition with the indication 'Voice Evacuation Fault'
J – Extinguisher Fault Input	Activates a fault condition with the indication 'Extinguisher Fault'
K – Extinguisher Activated Input	Lights up the 'Extinguisher Activated' indicator
L – Smoke ventilation Activated Input	Lights up the 'Smoke ventilation Activated' indicator
M – Customer LED 1 Activation	Lights up the 'Customer LED 1' indicator
N – Customer LED 2 Activation	Lights up the 'Customer LED 2' indicator
O – Internal Logic Input	Signals the internal control logic of the activation
P – External Logic Input	Signals an external control logic of the activation

ALC loops: Output functions

Output function popup menu	Activated ...
0 – Not in use	
1 – Fire Alarm Devices	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 2)
2 – Fire Alarm Devices Non-Silenceable	if fire alarm condition is active and alarm devices are not disabled
J – Fire Alarm Devices, Level 1 Silenceable	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 1 or access level 2)
3 – Fault Warning Alarm Devices	if fault warning condition is active and alarm devices are not disabled nor silenced
H – Voice Evacuation Activate Output	if fire alarm condition is active
I – Voice Evacuation Test Output	if fire alarm is initiated in test condition
4 – Fire Alarm Output	if fire alarm condition is active
5 – Prewarning Output	if prewarning condition is active
6 – Fault Warning Output	if fault warning condition is active
7 – Maintenance Warning Output	if maintenance warning condition is active
K – General Reset Output	for 30 sec. when any alarm condition is reset
8 – Fire Door Output	if any of the conditions set in 'General panel data' – 'Control outputs' – 'Fire door control' is active
9 – Extinguisher Output	if fire alarm condition is active

A – Disablement Output	if anything is disabled in the panel
L – Zone Disabled Output	if any detection zone is disabled
B – Access Level Output	if the key is turned to the operating position
C – Technical Alarm Output	if technical alarm
D – Internal Logic Output	by command from the internal control logic
E – External Logic Output	by command from an external control logic
F – Delayed Fire Alarm Output	if delayed fire alarm condition is active
G – Fire Alarm Transmitter Activated LED Output	If the 'Fire Alarm Transmitter Activated' LED is lit

SLC loops: Device types

Device type popup menu	Sub menu items	Comments
0 – Not in use		
1 – Ionization sensor	1 - 200 series	
2 – Optical sensor	0 - Advanced series 1 - 200 series	
3 – Static thermal sensor	0 - Advanced series 1 - 200 series	
G – ROR thermal sensor	0 - Advanced series 1 - 200 series	
H – High temp. thermal sensor	0 - Advanced series 1 - 200 series	
9 – Laser LZR-1	1 - 200 series	
A – Laser 7251	1 - 200 series	
B – Multicriteria	0 - Advanced series 1 - 200 series	
D – Three criteria sensor	0 - Advanced series 1 - 200 series	
E – Four criteria sensor	0 - Advanced series 1 - 200 series	
F – Beam sensor	0 - Advanced series 1 - 200 series	
Y – Beam sensor w. testfilter		
I - Manual Call Point indoor		
J - Manual Call Point outdoor		
5 - Single Input module	0 - Advanced series 1 - 200 series	
L - Dual Input module		
M - Dual Input, Single Output module		
6 - Single Output module	0 - Advanced series 1 - 200 series	
N - Single Output 240V module		
7 - Conventional Zone module	0 - Advanced series 1 - 200 series	
X - Conv. Zone module CZR		
S - Wall Mount Sounder		
T - Wall Mount Sounder Strobe		
U - Wall Mount Strobe		
V - Detector Base Sounder		
W - Detector Base Sounder Strobe		
C - Any Type (virtual)		Nothing has to be installed. Can be set in alarm condition only through alarm test or through the INFO communication protocol.
8 - Any Type		Some device has to be installed.

SLC loops: Conventional zone module input functions

Conventional zone module input functions	Comments
0 – Conventional Zone	
1 – Conventional beam detector	

SLC loops: Input functions

| Input function popup menu	Action on activation
0 – Not In Use	None
1 – Manual Call Point	Fire alarm
2 – Reserved	
3 – Conv. Heat Detector	Fire alarm
4 – Fire Alarm Input	Fire alarm
5 – Prealarm Input	Prewarning
6 – Fault warning Input	Fault warning
7 – Maintenance Input	Maintenance warning
8 – Technical Alarm Input	Technical alarm
9 – Silent Tech Alarm Input	Technical alarm
Q – Local Evacuation Input	Activates all alarm devices of this panel
A – Evacuation Input	Activates all alarm devices of all visible panels
B – Zone Disablement Input	Disables the zone to which the module is configured
R – Local Day Mode Activation Input	Sets this panel in day mode
S – Local Delayed Alarm Enable Input	Enables the delayed alarm function of this panel
T – Local Day Mode and Delayed Alarm Enable Input	Sets this panel in day mode and enables the delayed alarm function
C – Day Mode Activation Input	Sets all visible panels in day mode
D – Delayed Alarm Enable Input	Enables the delayed alarm function of all visible panels
E – Day Mode and Delayed Alarm Enable Input	Sets all visible panels in day mode and enables the delayed alarm function
F – Delayed Alarm Zonal Silence	Silences a delayed alarm in the same zone as the monitor module
G – Delayed Alarm Zonal Reset	Resets a delayed alarm in the same zone as the monitor module
H – General Silence Input	Silences the alarm condition of all visible panels
I – General Reset Input	Resets the alarm condition of all visible panels
U – Local Fire Alarm Devices Mute Input	Mutes alarm devices of this panel for the time a Voice evacuation message is announced
V – Fire Alarm Devices Mute Input	Mutes alarm devices of all visible panels for the time a Voice evacuation message is announced
W – Voice Evacuation Fault Input	Activates a fault condition with the indication 'Voice Evacuation Fault'
J – Extinguisher Fault Input	Activates a fault condition with the indication 'Extinguisher Fault'
K – Extinguisher Activated Input	Lights up the 'Extinguisher Activated' indicator
L – Smoke ventilation Activated Input	Lights up the 'Smoke ventilation Activated' indicator
M – Customer LED 1 Activation	Lights up the 'Customer LED 1' indicator
N – Customer LED 2 Activation	Lights up the 'Customer LED 2' indicator
O – Internal Logic Input	Signals the internal control logic of the activation
P – External Logic Input	Signals an external control logic of the activation

SLC loops: Output functions

Output function popup menu	Activated ...
0 – Not in use	

1 – Fire Alarm Devices	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 2)
2 – Fire Alarm Devices Non-Silenceable	if fire alarm condition is active and alarm devices are not disabled
J – Fire Alarm Devices, Level 1 Silenceable	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 1 or access level 2)
3 – Fault Warning Alarm Devices	if fault warning condition is active and alarm devices are not disabled nor silenced
H – Voice Evacuation Activate Output	if fire alarm condition is active
I – Voice Evacuation Test Output	if fire alarm is initiated in test condition
4 – Fire Alarm Output	if fire alarm condition is active
5 – Prewarning Output	if prewarning condition is active
6 – Fault Warning Output	if fault warning condition is active
7 – Maintenance Warning Output	if maintenance warning condition is active
K - General Reset Output	for 30 sec. when any alarm condition is reset
8 – Fire Door Output	if any of the conditions set in 'General panel data' – 'Control outputs' – 'Fire door control' is active
9 – Extinguisher Output	if fire alarm condition is active
A – Disablement Output	if anything is disabled in the panel
L – Zone Disabled Output	if any zone is disabled
B – Access Level Output	if the key is turned to the operating position
C – Technical Alarm Output	if technical alarm
D – Internal Logic Output	by command from the internal control logic
E – External Logic Output	by command from an external control logic
F – Delayed Fire Alarm Output	if delayed fire alarm condition is active
G – Fire Alarm Transmitter Activated LED Output	If the 'Fire Alarm Transmitter Activated' LED is lit

LC loops: Device types

Selection	Actual type	Comment
0 – None		
1 – Analog ion	1251E, 1551E	
2 – Analog opt	2251E, 2551E	
3 – Analog heat	5251EM, 5251REM and 5251HTEM	
4 – OMNI	3251E	
9 – Laser LZR-1	LZR – 1E	
A – Laser 7251	7251	
B – Multisensor	2251TEM	
D – Three criteria sensor	PTIR	
E – Four criteria sensor	COPTIR	
F – Beam sensor	6200, 6500	
5 – Monitor Module	M210ME, M220ME, M221ME	See functional types below
6 – Control Module	M201ME, M221ME	See functional types below
7 – Conventional Zone Module	M512ME, M210CZ	See functional types below
8 – Any Type	Any of the above	
C – Any Type (virtual)	Nothing has to be installed. Can be set in alarm condition only through alarm test or through the INFO communication protocol	

Note! The items '9 – Laser LZR-1' and 'A – Laser 7251' are enabled only if allowed by your license file.

LC loops: Conventional zone module input functions

Selection	Used when ...
0 – Conventional Zone	a conventional zone is connected to the M512ME
1 – Beam Detector	a conventional beam detector is connected to the M512ME

NOTE! There's no difference in the operation of the address for these selections, except the text displayed in the LCD of the panel when looking at address data.

LC loops: Monitor module input functions

Selection	Action on activation
0 – Manual Call Point / Al'm Switch	Fire alarm
1 – Manual Call Point	Fire alarm
2 – Beam Detector (See Note below)	Fire alarm
3 – Conv. Heat Detector	Fire alarm
4 – Fire Alarm Input	Fire alarm
5 – Prewarning Input	Prewarning
6 – Fault Warning Input	Fault warning
7 – Maintenance Input	Maintenance warning
8 – Technical Alarm Input	Technical alarm
9 – Silent Tech Alarm Input	Technical alarm
Q – Local Evacuation Input	Activates all alarm devices of the same panel
A – Evacuation Input	Activates all alarm devices of all visible panels
B – Zone Disablement Input	Disables the zone to which the module is configured
R – Local Day Mode Activation Input	Sets this panel in day mode
S – Local Delayed Alarm Enable Input	Enables the delayed alarm function of this panel
T – Local Day Mode and Delayed Alarm Enable Input	Sets this panel in day mode and enables the delayed alarm function
C – Day Mode Activation Input	Sets all visible panels in day mode.
D – Delayed Alarm Enable Input	Enables the delayed alarm function of all visible panels
E – Day Mode and Delayed Alarm Enable Input	Sets all visible panels in day mode and enables the delayed alarm function
F – Delayed Alarm Zonal Silence	Silences a delayed alarm in the same zone as the monitor module and starts delay timer T2
G – Delayed Alarm Zonal Reset	Resets a delayed alarm in the same zone as the monitor module
H – General Silence Input	Silences the alarm condition of all visible panel
I – General Reset Input	Resets the alarm condition of all visible panel
U – Local Fire Alarm Devices Mute Input	Mutes alarm devices of this panel for the time a Voice evacuation message is announced
V – Fire Alarm Devices Mute Input	Mutes alarm devices of all visible panels for the time a Voice evacuation message is announced
W – Voice Evacuation Fault Input	Activates a fault condition with the indication 'Voice Evacuation Fault'
J – Extinguisher Fault Input	Activates a fault condition with the indication 'Extinguisher Fault'
K – Extinguisher Activated Input	Lights up the 'Extinguisher Activated' indicator
L – Smoke ventilation Activated Input	Lights up the 'Smoke ventilation Activated' indicator
M – Customer LED 1 Activation	Lights up the 'Customer LED 1' indicator
N – Customer LED 2 Activation	Lights up the 'Customer LED 2' indicator
O – Internal Logic Input	Signals the internal control logic of the activation
P – External Logic Input	Signals an external control logic of the activation

Note!
Item '2 – Beam Detector' is obsolete and cannot be selected. Conventional beam detectors should be connected to a Conventional Zone Module (M512ME)

LC loops: Control Module output functions

Selection	Activated ...
1 – Fire Alarm Devices	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 2)
2 – Fire Alarm Devices Non-Silence-able	if fire alarm condition is active and alarm devices are not disabled
J – Fire Alarm Devices, Lev. 1 Silence-able	if fire alarm condition is active and alarm devices are not disabled nor silenced (at access level 1 or access level 2)
3 – Fault Warning Alarm Devices	if fault warning condition is active and alarm devices are not disabled nor silenced
H – Voice Evacuation Activate Output	if fire alarm condition is active
I – Voice Evacuation Test Output	if fire alarm is initiated in test condition
4 – Fire Alarm Output	if fire alarm condition is active
5 – Prewarning Output	if prewarning condition is active
6 – Fault Warning Output	if fault warning condition is active
7 – Maintenance Warning Output	if maintenance warning condition is active
K – General Reset Output	for 30 sec. when any alarm condition is reset
8 – Fire Door Output	if any of the conditions set in 'General panel data' – 'Control outputs' – 'Fire door control' is active
9 – Extinguisher Output	if fire alarm condition is active
A – Disablement Output	if anything is disabled in the panel
L – Zone Disabled Output	if any detection zone is disabled
B – Access Level Output	if the key is turned to the operating position
C – Technical Alarm Output	if technical alarm
D – Internal Logic Output	by command from the internal control logic
E – External Logic Output	by command from an external control logic
F – Delayed Fire Alarm output	if delayed fire alarm condition is active
G – Fire alarm transmitter activated LED output	If the 'Fire Alarm Transmitter Activated' LED is lit

Changing sensitivity and detection parameters

When you enter any of the detection parameters fields for the first time, the following warning will be displayed:
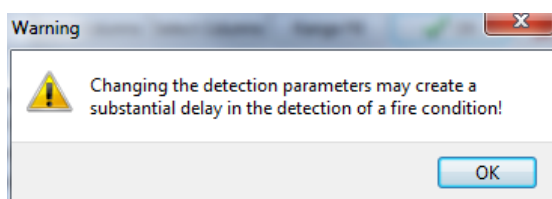
Please be aware that the parameters should only be changed if really needed, and that relevant persons, including fire authorities, insurance company and owner of the building should agree upon the modifications. The person doing the modification has full responsibility that such an agreement exists in writing.

SLC loops (Adv. protocol COPTIR): Environment setting

The SLC Advanced protocol COPTIR (four criteria) sensor sensitivity can be set with a new setting called Environment setting. Main purpose is to avoid nuisance alarms in certain environments. The following table shows the environment settings and descriptions.

Environment	Short description	Detailed description	Thresholds
Normal			Settable
Environment 0	Hotel bedroom near shower	Steam and rate of rise in heat from opening bathroom door causing alarm. Detector installed close to bathroom door.	Fixed at level 4
	Boiler rooms	Dust and rate of rise heat causing false alarms.	Fixed at level 4
Environment 1	Student dormitory	Smoke from small appliance cooking or cigarette etc. Smoking cigarettes with increase in CO levels.	Fixed at level 5
	Hotel rooms for smokers	Smoke from cigarettes etc. Smoking cigarettes with increase in CO levels.	Fixed at level 5
Environment 2	Insect alarms	Photo sensor only alarm.	Fixed at level 5
	Condensation	Condensation in attics and other normally unheated spaces e.g. pump houses, service intake rooms and similar. Photo sensor only alarm.	Fixed at level 5
	Heavy manufacturing	Alarm from photo sensor due to dust/dirt. This application may include welding.	Fixed at level 5
	Strobes in industrial areas	Alarm from photo sensor due to light dazzling and may include welding.	Fixed at level 4
Environment 3	Dusty environments	Dusty environments and settled dust turbulence in the chamber before drift alarm reached. Photo sensor only alarm.	Fixed at level 5
	AHU rooms and lift motor rooms	Alarm form photo sensor due to dust burst.	Fixed at level 5
Environment 4	Synthetic smoke	Synthetic smoke in discotheques and dazzling lights from strobes. Photo sensor alarm. Can compromise drift compensation. May also include smoking cigarettes etc. in audience with associated CO levels.	Fixed at level 5
	Bar Areas	Alarm from photo sensor due to steam from glass washers and cigarette smoke.	Fixed at level 5
	Smoking area	Alarm from photo and CO sensors response due to cigarettes etc.	Fixed at level 5
Environment 5	Car parks and loading bays	Car parks and loading bay with trucks having upward exhaust pipes or poor operating engines. Includes traffic build-up in cities.	Fixed at level 5
	Kitchens	Kitchens including industrial, canteens, and retirement homes.	Fixed at level 5
Environment 6	Paint shops and repair shops	Alarm from photo and rate of rise sensors. This application may include welding and vehicles running inside building.	Fixed at level 5
Environment 7	Long lasting optical stimulus	Special disco fog, anti burglar smoke, misty/foggy area, etc.	Fixed at level 5

Note! Remember to re-evaluate the settings if the environment of the location of the sensor changes.

ALC loops and SLC loops (Adv. protocol devices): Fire and prealarm thresholds

Selectable for all intelligent detectors

```
1 - Level 1 - most sensitive
2 - Level 2
3 - Level 3
4 - Level 4
5 - Level 5 - Least sensitive
```
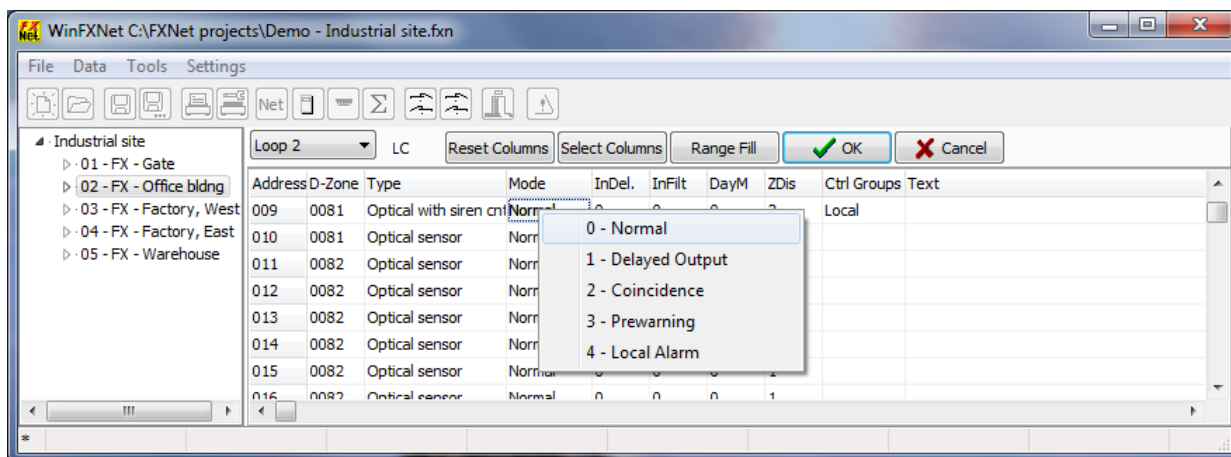
Selectable for Multisensor in an ALC loop

```
1 - Level 1 - most sensitive
2 - Level 2 - only smoke detection
3 - Level 3
4 - Level 4
5 - Level 5 - only thermal detection
```

LC loops and SLC loops (200 protocol devices): Fire and prewarning thresholds

To change the alarm threshold for an address, right-click in the field and the level selection menu will be displayed. You can also select a level with the numeric keys without having the level menu displayed.

Selectable for the Laser LZR-1 detector

```
1 - Level 1 - most sensitive
2 - Level 2
3 - Level 3
4 - Level 4
5 - Level 5
6 - Level 6
7 - Level 7
8 - Level 8
9 - Level 9
0 - Level 10 - least sensitive
```

Selectable for the Laser 7251 detector

```
1 - Level 1 - most sensitive
2 - Level 2
3 - Level 3
4 - Level 4
5 - Level 5
6 - Level 6
7 - Level 7
8 - Level 8
9 - Level 9 - least sensitive
```

Selectable for multicriteria detectors
(two-, three- and four-criteria)

```
1 - Level 1 - most sensitive
2 - Level 2
3 - Level 3
4 - Level 4
5 - Level 5
6 - Level 6 - only thermal detection
```

Selectable for all other detectors

```
1 - Level 1 - most sensitive
2 - Level 2
3 - Level 3
4 - Level 4
5 - Level 5 - Least sensitive
```

The **Laser LZR-1** detectors in a FX detection zone form a 'laser group'. This means that all laser detectors in a zone contribute to a common evaluation to issue a fire alarm or prewarning according to the following:
- The values from the laser detectors are scaled to the range 0.00 to 1.00. 1.00 corresponds to the selected prewarning or fire alarm threshold
- The scaled values are squared and added
- If the result is 1.00 or above the group issues a fire alarm.
- Since this 'group alarm' is issued before any of the individual detectors are above the alarm threshold, the detector with the highest value will be reported as the alarming address

Note! The **Laser 7251** detector does not have the 'Laser group' feature.

Functional mode

To select the functional mode of an address, right-click with the mouse pointer in the mode field. A menu with available selections will be displayed. You can also select an item with the numeric keys without having the menu displayed.

Selection	Meaning
0 – Normal	No special functional mode
1 – Delayed Output	The alarm transmitter output is delayed according to the times T1 and T2 configured in the 'General Panel Data – Delayed outputs'
2 – Coincidence	The address will not alone issue a fire alarm condition. There has to be another address in alarm condition in the same zone before the alarm will be displayed. If the address is detecting a fire alone, it will be displayed as a prewarning.
3 – Prewarning	The address will not issue a fire alarm condition. It will only display prewarning.
4 – Local Alarm	The alarm transmitter is not activated by an alarm from the address. All other local control functions will take place.

Sounder mode (Apollo sounders except DSB Sounder Beacon)

If the address is an alarm device (sounder), the mode field is used to change the functional mode of sounders. To select the functional mode of an alarm device address, right-click with the mouse pointer in the mode field. A menu with available selections will be displayed.
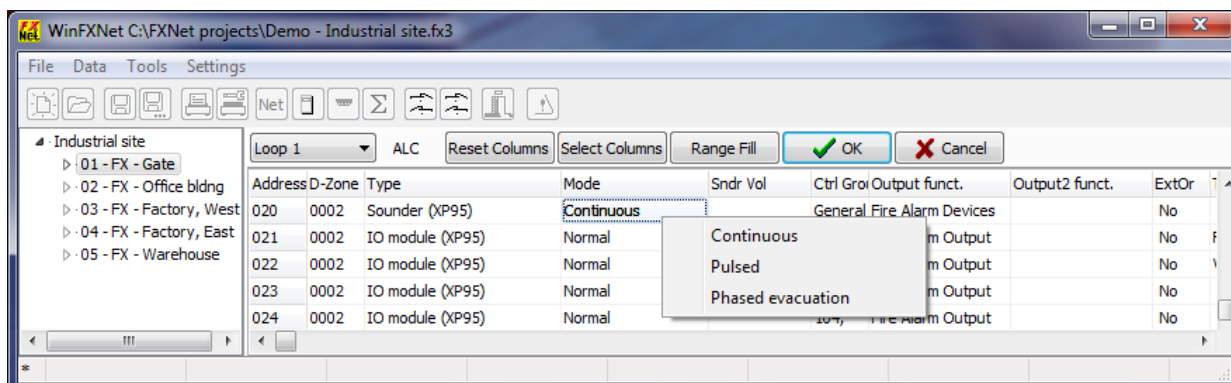
Selection	Meaning
Continuous	Continuous mode
Pulsed	Pulsed, or intermittent mode
Phased evacuation	The sounder gives an Alert signal if CtrlGroups includes the alarming detectors CtrlA group and an Evacuate signal if CtrlGroups includes the alarming detectors CtrlB group

Sounder mode (Apollo DSB Sounder Beacon)
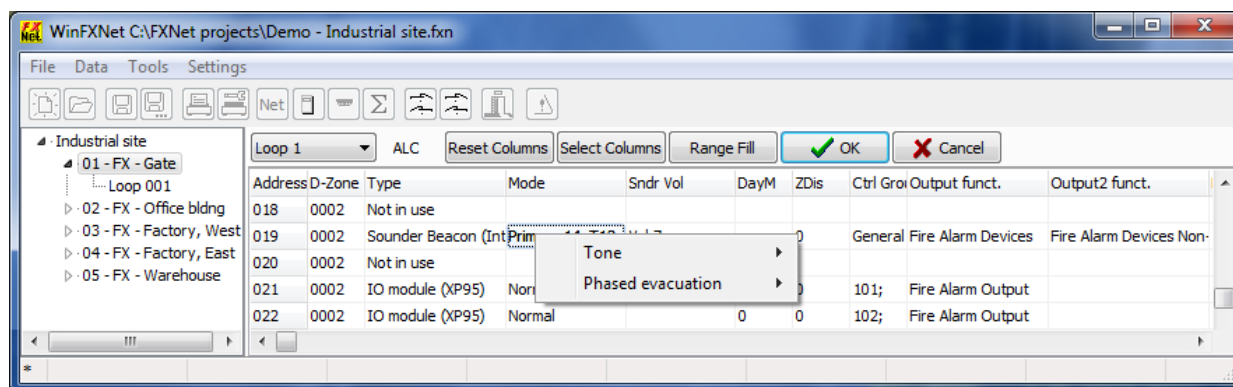
You can select either a single tone (or tone pattern) or you can choose phased evacuation with separate tones (or tone patterns) for phase 1 and phase 2.

For a single tone, select one of the following:

1	- Primary	T1	Apollo Evacuation Tone	550Hz for 0.5s, 825Hz for 0.5s
2	- Primary	T12	Alternating - (Hochiki & Fulleon)	925Hz for 0.25s, 626Hz for 0.25s
3	- Primary	T14	Medium Sweep	800Hz to 970Hz at 1Hz
4	- Primary	T16	Fast Sweep	2500Hz -2850Hz at 9Hz
5	- Primary	T3	Dutch Slow Whoop (sweep)	500Hz - 1200Hz for 3.5s, 0.5s off
6	- Primary	T4	DIN Tone (sweep)	1200Hz - 500Hz for 1s
7	- Primary	T18	Swedish Fire Tone	660Hz, 150ms on, 150ms off
8	- Primary	T6	Aus (fast rise sweep)	3x (500Hz - 1200Hz for 0.5s), 0.5s off
9	- Primary	T7	NZ (slow rise sweep)	500Hz - 1200Hz for 3.75s, 0.25s off
A	- Primary	T19	US Temporal LF (ISO 8201)	3x (970Hz, 0.5s on, 0.5s off), 1s off
B	- Primary	T20	US Temporal HF (ISO 8201)	3x (2850Hz, 0.5s on, 0.5s off), 1s off
C	- Primary	T8	Simulated Bell - Continuous	n/a
D	- Primary	T10	Emergency Warning Siren	n/a
E	- Primary	T13	Continuous	970Hz
F	- Primary	T1	Apollo Evacuation Tone	550Hz for 0.5s, 825Hz for 0.5s
G	- Secondary	T0	Apollo Alert Tone	1s off, 825Hz for 1s
H	- Secondary	T11	Continuous (Hochiki & Fulleon)	925Hz
I	- Secondary	T13	Continuous	970Hz
J	- Secondary	T15	Continuous	2850Hz
K	- Secondary	T2	Continuous	825Hz
L	- Secondary	T2	Continuous	825Hz
M	- Secondary	T17	Continuous	660Hz
N	- Secondary	T5	Aus Alert Tone	420Hz, 0.625s, 0.625s off
O	- Secondary	T5	NZ Alert Tone	420Hz, 0.625s, 0.625s off
P	- Secondary	T13	Continuous	970Hz
Q	- Secondary	T15	Continuous	2850Hz
R	- Secondary	T9	Simulated Bell - Intermittent	1s off, 1s on
S	- Secondary	T22	Emergency Warning Siren	n/a
T	- Secondary	T21	Pulsed at 1s off, 1s on	970Hz
U	- Secondary	T0	Apollo Alert Tone	1s off, 825Hz for 1s

Note! The words "Primary" and "Secondary" comes from the columns of the table in the installation leaflet that describes the tones. For a **single tone** selection they are irrelevant with respect to the tone and when and why the sounder is activated. For example Primary T13 is exactly the same as Secondary T13. The output function of the address determines when the sounder is activated.

For a phased evacuation tone (pattern) pair, select one of the following:
(Secondary is the alert tone - phase 1 and Primary is the evacuate tone - phase 2)

1 -	Primary	T1	Apollo Evacuation Tone	550Hz for 0.5s, 825Hz for 0.5s
	Secondary	T0	Apollo Alert Tone	825Hz, 1s off, 1s on
2 -	Primary	T12	Alternating - (Hochiki & Fulleon)	925Hz for 0.25s, 626Hz for 0.25s
	Secondary	T11	Continuous (Hochiki & Fulleon)	925Hz
3 -	Primary	T14	Medium Sweep	800Hz to 970Hz at 1Hz
	Secondary	T13	Continuous	970Hz
4 -	Primary	T16	Fast Sweep	2500Hz -2850Hz at 9Hz
	Secondary	T15	Continuous	2850Hz
5 -	Primary	T3	Dutch Slow Whoop (sweep)	500Hz - 1200Hz for 3.5s, 0.5s off
	Secondary	T2	Continuous	825Hz
6 -	Primary	T4	DIN Tone (sweep)	1200Hz - 500Hz for 1s
	Secondary	T2	Continuous	825Hz
7 -	Primary	T18	Swedish Fire Tone	660Hz, 150ms on, 150ms off
	Secondary	T17	Swedish (all clear signal) - Continuous	660Hz
8 -	Primary	T6	Aus (fast rise sweep)	3x (500Hz - 1200Hz for 0.5s), 0.5s off
	Secondary	T5	Aus Alert Tone	420Hz, 0.625s, 0.625s off
9 -	Primary	T7	NZ (slow rise sweep)	500Hz - 1200Hz for 3.75s, 0.25s off
	Secondary	T5	NZ Alert Tone	420Hz, 0.625s, 0.625s off
A -	Primary	T19	US Temporal LF (ISO 8201)	3x (970Hz, 0.5s on, 0.5s off), 1s off
	Secondary	T13	Continuous	970Hz
B -	Primary	T20	US Temporal HF (ISO 8201)	3x (2850Hz, 0.5s on, 0.5s off), 1s off
	Secondary	T15	Continuous	2850Hz
C -	Primary	T8	Simulated Bell - Continuous	
	Secondary	T9	Simulated Bell - Intermittent	1s off, 1s on
D -	Primary	T10	Emergency Warning Siren	
	Secondary	T22	Emergency Warning Siren (All Clear)	
E -	Primary	T13	Continuous	970Hz
	Secondary	T21	Pulsed	970Hz, 1s off, 1s on
F -	Primary	T1	Apollo Evacuation Tone	550Hz for 0.5s, 825Hz for 0.5s
	Secondary	T0	Apollo Alert Tone	825Hz, 1s off, 1s on

Sounder mode (System Sensor Advanced Protocol sounders and sounder-strobes)
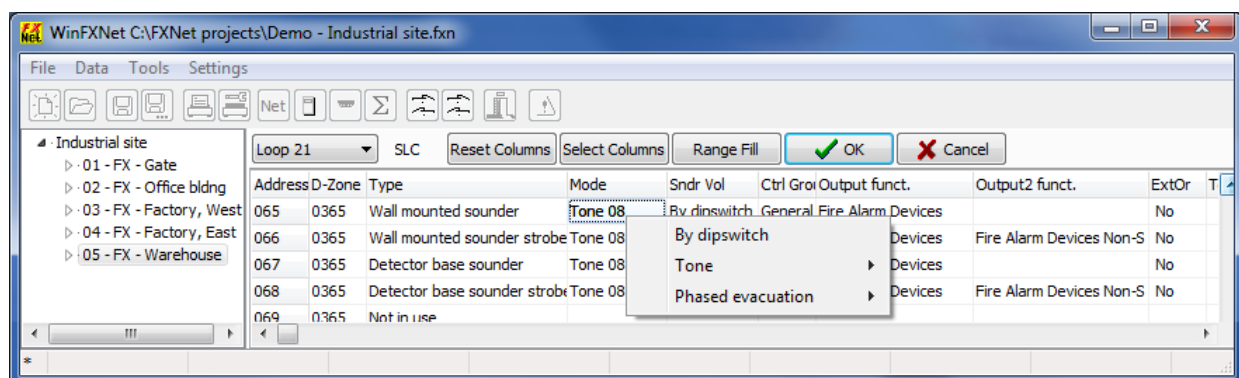
Selection	Meaning
By dipswitch	Tone selection is made by a dipswitch in the sounder
Tone	Selection of a single tone, see list below
Phased evacuation	Selection of a tone pair, see list below. The sounder gives an Alert signal if CtrlGroups includes the alarming detectors CtrlA group and an Evacuate signal if CtrlGroups includes the alarming detectors CtrlB group

Single tone options

Tone	Tone pattern
Tone 01	Alternating, 554/ 440 Hz, 100ms/400ms
Tone 02	Alternating, 800/ 970 Hz, 500ms/500ms
Tone 03	Alternating, 800/ 970 Hz, 250ms/250ms
Tone 04	Alternating, 2400/2900 Hz, 166ms/166ms
Tone 05	Alternating, 2500/3100 Hz, 250ms/250ms
Tone 06	Alternating, 988/ 645 Hz, 250ms/250ms
Tone 07	Continuous, 660Hz
Tone 08	Continuous, 970Hz
Tone 09	Continuous, 1200Hz
Tone 10	Continuous, 2850Hz
Tone 11	Sweep, 150-1000- 150Hz, 10s, 40s, 10s, 20s
Tone 12	Intermittent, 420Hz, 0.625s on, 0.625s off
Tone 13	Sweep, 500-1200Hz, 3.75s on, 0.25s off
Tone 14	Intermittent, 660Hz, 150ms on, 150ms off
Tone 15	Intermittent, 970Hz, 250ms on, 1s off
Tone 16	Intermittent, 970Hz, 1s on, 1s off
Tone 17	Intermittent, 2850Hz, 500ms on, 500ms off
Tone 18	Intermittent, 970Hz, 500ms on, 500ms off
Tone 19	Intermittent, 950Hz, (0.5s on, 0.5s off)x3, 1.5s off
Tone 20	Continuous, 800Hz
Tone 21	Sweep, 400-1200Hz, (0.5s on, 0.5s off)x3, 1.5s off
Tone 22	Sweep, 1200- 500Hz, 1s on, 0.01s off
Tone 23	Sweep, 2400-2850Hz, 7Hz
Tone 24	Sweep, 500-1200Hz, 3.5s on, 0.5s off
Tone 25	Sweep, 800- 970Hz, 50Hz
Tone 26	Sweep, 800- 970Hz, 7Hz
Tone 27	Sweep, 800- 970Hz, 1Hz
Tone 28	Sweep, 2400-2850Hz, 50Hz
Tone 29	Sweep, 500-1000Hz, 7Hz
Tone 30	Sweep, 500-1200-500Hz, 1s, 4s, 1s
Tone 31	Sweep, 800-1000Hz, 2Hz
Tone 32	Sweep, 2400-2850Hz, 1Hz

Tone pair options

Tone pair	Evacuation tone	Alert tone
Tone pair 01	Alternating, 554/ 440 Hz, 100ms/400ms	Continuous, 660Hz
Tone pair 02	Alternating, 800/ 970 Hz, 500ms/500ms	Continuous, 970Hz
Tone pair 03	Alternating, 800/ 970 Hz, 250ms/250ms	Continuous, 970Hz
Tone pair 04	Alternating, 2400/2900 Hz, 166ms/166ms	Continuous, 2850Hz
Tone pair 05	Alternating, 2500/3100 Hz, 250ms/250ms	Continuous, 2850Hz
Tone pair 06	Alternating, 988/ 645 Hz, 250ms/250ms	Continuous, 970Hz
Tone pair 07	Continuous, 660Hz	Alternating, 554/ 440 Hz, 100ms/400ms
Tone pair 08	Continuous, 970Hz	Alternating, 800/ 970 Hz, 500ms/500ms
Tone pair 09	Continuous, 1200Hz	Alternating, 800/ 970 Hz, 500ms/500ms
Tone pair 10	Continuous, 2850Hz	Alternating, 2400/2900 Hz, 166ms/166ms
Tone pair 11	Sweep, 150-1000- 150Hz, 10s, 40s, 10s, 20s	Sweep, 1200- 500Hz, 1s on, 0.01s off
Tone pair 12	Intermittent, 420Hz, 0.625s on, 0.625s off	Sweep, 500-1200Hz, 3.75s on, 0.25s off
Tone pair 13	Sweep, 500-1200Hz, 3.75s on, 0.25s off	Intermittent, 420Hz, 0.625s on, 0.625s off
Tone pair 14	Intermittent, 660Hz, 150ms on, 150ms off	Continuous, 660Hz
Tone pair 15	Intermittent, 970Hz, 250ms on, 1s off	Continuous, 970Hz
Tone pair 16	Intermittent, 970Hz, 1s on, 1s off	Continuous, 970Hz
Tone pair 17	Intermittent, 2850Hz, 500ms on, 500ms off	Continuous, 2850Hz
Tone pair 18	Intermittent, 970Hz, 500ms on, 500ms off	Continuous, 970Hz
Tone pair 19	Intermittent, 950Hz, (0.5s on, 0.5s off)x3, 1.5s off	Intermittent, 420Hz, 0.625s on, 0.625s off
Tone pair 20	Continuous, 800Hz	Sweep, 1200- 500Hz, 1s on, 0.01s off
Tone pair 21	Sweep, 400-1200Hz, (0.5s on, 0.5s off)x3,1.5s off	Intermittent, 420Hz, 0.625s on, 0.625s off
Tone pair 22	Sweep, 1200- 500Hz, 1s on, 0.01s off	Continuous, 800Hz
Tone pair 23	Sweep, 2400-2850Hz, 7Hz	Continuous, 2850Hz
Tone pair 24	Sweep, 500-1200Hz, 3.5s on, 0.5s off	Continuous, 970Hz
Tone pair 25	Sweep, 800- 970Hz, 50Hz	Continuous, 970Hz

Tone pair 26	Sweep, 800- 970Hz, 7Hz	Continuous, 970Hz
Tone pair 27	Sweep, 800- 970Hz, 1Hz	Continuous, 970Hz
Tone pair 28	Sweep, 2400-2850Hz, 50Hz	Continuous, 2850Hz
Tone pair 29	Sweep, 500-1000Hz, 7Hz	Continuous, 970Hz
Tone pair 30	Sweep, 500-1200-500Hz, 1s, 4s, 1s	Continuous, 970Hz
Tone pair 31	Sweep, 800-1000Hz, 2Hz	Continuous, 970Hz
Tone pair 32	Sweep, 2400-2850Hz, 1Hz	Continuous, 2850Hz

Sounder volume

Sounder volume can be set in the configuration for Apollo DSB Sounder Beacon and for System Sensor Advanced Protocol wall and base sounders (-strobes).

The available options are:

For Apollo DSB	For SySe Adv. Protocol sounders
1 - Vol 1	0 - By dipswitch
2 - Vol 2	1 - Low
3 - Vol 3	2 - Medium
4 - Vol 4	3 - High
5 - Vol 5	
6 - Vol 6	
7 - Vol 7	

Input delay

To select 'Input Delay for an address, right-click with your mouse pointer in the 'InDel.' field. A menu with the available options will be displayed. You can also select the delay times with the numeric keys 0 to 6 without having the menu displayed.
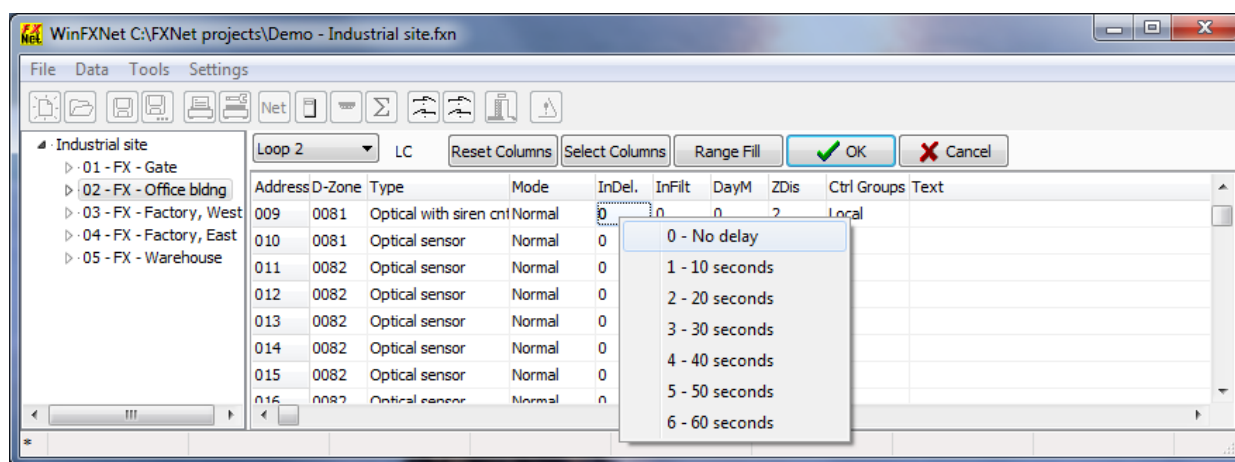
The detector has to remain in fire alarm condition for the time specified before an alarm condition will be issued.

The purpose of the delay is to avoid false alarms caused by disturbances in the environment of the detector or detection circuit (loop).

Input filter
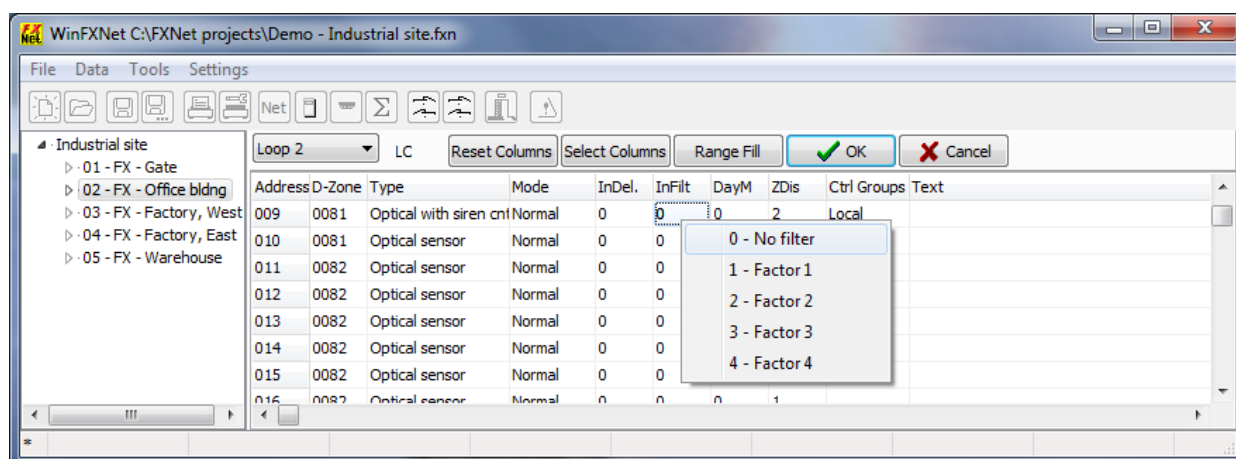
Note! Input filter setting is not needed and thus not available for Advanced protocol devices.

Effect of day mode activation

You can define different sensitivities for the detectors in day mode than for normal (night) mode. In this column you can specify whether the address should be affected by day mode at all, and if so whether it should use the day mode sensitivity settings or be disabled.
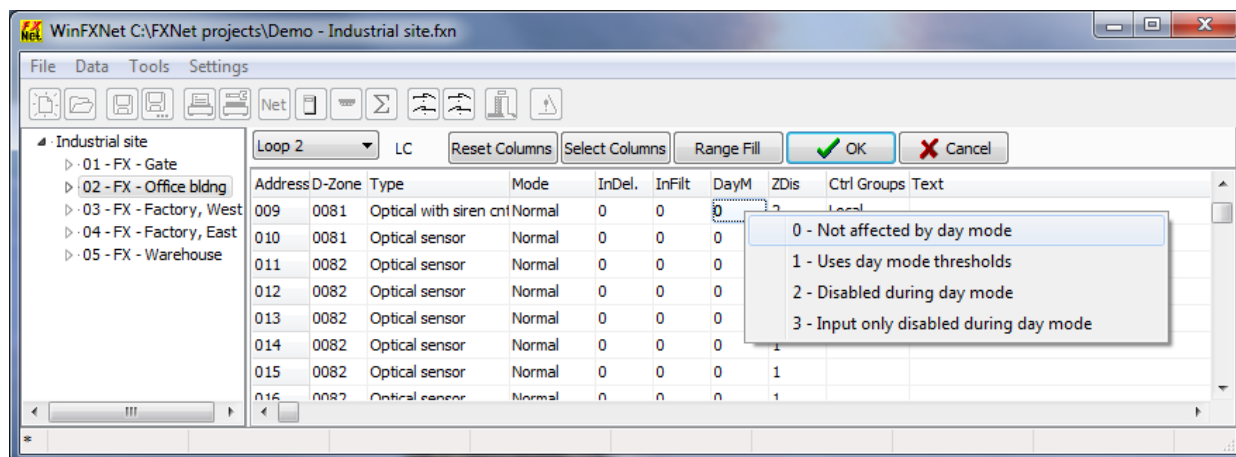
Selection	Meaning
0 – Not affected by day mode	The address is not affected by day mode
1 – Uses day mode thresholds	The address uses thresholds set in the D-Fire and D-Prew columns during day mode
2 – Disabled during day mode	The address is disabled during day mode. The disablement concerns all functionality of the address. Sensor input, fault monitoring and output control are all disabled.
3 – Input only disabled during day mode	The address is partly disabled during day mode. The disablement concerns the sensor input, or if the address is an IO module the configured input function. Fault monitoring and output function are not disabled.

Effect of zonal disablement

In the ZDis column you can select how a disablement of the zone, to which the address belongs, should affect the address.
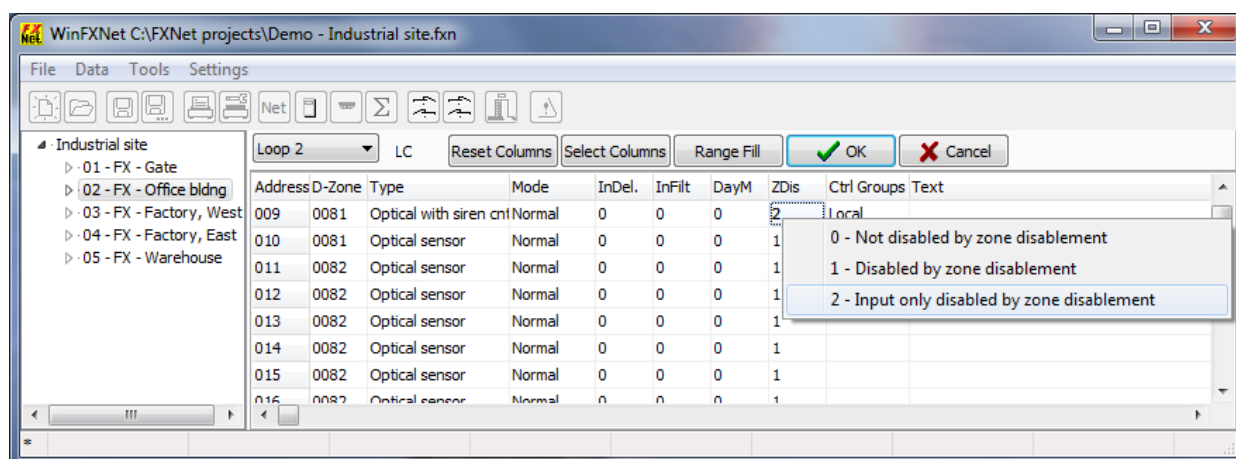
Selection	Meaning
0 – Not disabled by zone disablement	The address will not be disabled when the zone to which it belongs, is disabled.
1 – Disabled by zone disablement	The address will be disabled when the zone to which it belongs, is disabled. The disablement concerns all functionality of the address. Sensor input, fault monitoring and output control are all disabled.
2 – Input only disabled by zone disablement	The address will be partly disabled when the zone to which it belongs, is disabled. The disablement concerns the sensor input, or if the address is an IO module the configured input function. Fault monitoring and output function are not disabled.

It is common practice **not** to have e.g. manual call points disabled even if smoke detectors are disabled to prevent unwanted alarms.

Selecting control groups for outputs
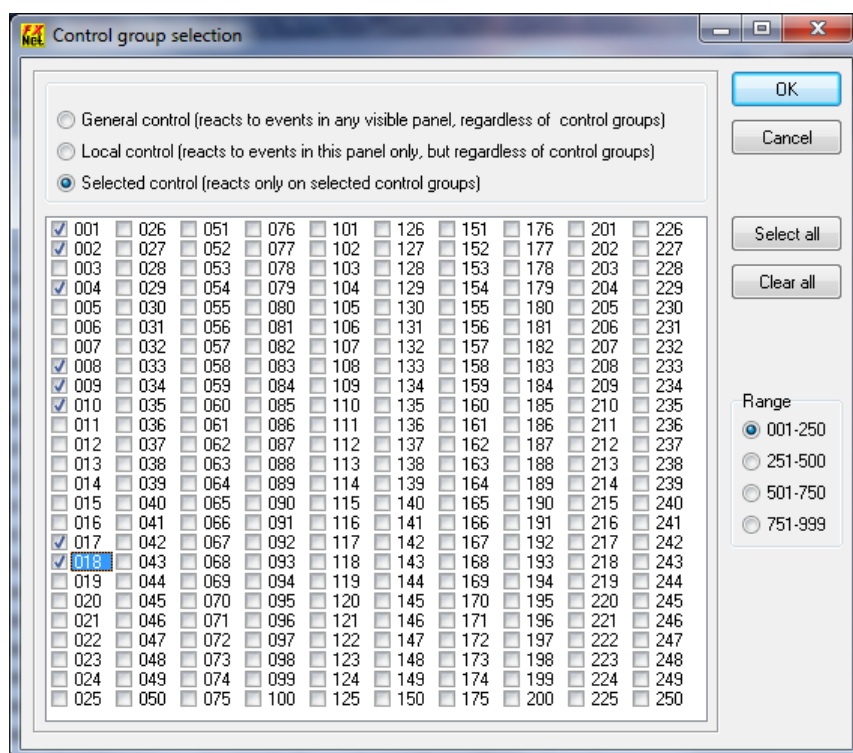
WinFXNet version 5.0 increased the number of control groups from 250 to 999. A control output can be controlled as a general control, a local control or by any combination of the control groups.

Combining output function with external control (ExtOr)

By selecting 'Yes' in the ExtOr column, the output will be activated as a logical 'OR' function between the assigned Output function and an External Logic input.

Editing texts

In the 'Text' column you a write a text, that will be displayed in the LCD of the panel in conjunction with an alarming address. The text could for example indicate the room number or the location of the detector.

Closing the Address Data window

All changes you have made during the editing of Address Data are stored in a temporary memory, so that you can select whether you want to keep the changes or if you want to return to the data you had before opening of the Address Data window. (Still you have to separately save the data in a file for later retrieval).
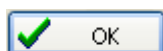
When you have entered data for selected addresses and you want to keep the data you can press the OK-button.
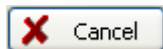
If you want to cancel any changes you have made you can press the Cancel-button.

Using delayed control groups

WinFXNet version 5.1 introduced new control features, which enable delayed sequential output controls.
- Each fire alarm input has, in addition to the previously existing CtrlA and CtrlB, seven new Control Group settings CtrlC1 ... CtrlC7.
- Each of the new Control Group settings can have a delay (Delay1 ... Delay7) of up to 59 minutes, 59 seconds.
- The delay timers start when the input issues a fire alarm and when a time expire, the corresponding Control Group is activated.
- The delay timers stop on Reset of the fire alarm condition.

Note that the delayed controls can only be defined for
- Input devices that initiate fire alarm condition, like fire detectors, manual call points etc.
- Output devices that react on fire alarm, like fire alarm devices, fire door output etc.

Thus, since the input lines of the MC board or the IOC board do not have a 'fire alarm input' function they are not listed in the following, while output lines of the MC, IOC or OCA are listed if they have a fire alarm related output function defined.

Because of the amount of new columns needed for the addresses and panel IO lines, the delayed controls have a new window accessible from the main menu, "**Data - Delayed Controls ...**"

The upper part of the form deals with control inputs, the lower part with control outputs. Note that an address, e.g. a fire detector can be listed both as an input and as an output.

Control Inputs

Inputs are collected in a hierarchical 'tree' on the left side of the upper part of the window, and depending on the selection in that tree, the inputs are listed in the table on the right side. When the topmost node in the tree is selected, all inputs in the FXNet system are listed in the table. When a panel is selected, all inputs of that panel are listed and so on.

The columns in the input table are

Column	Editable	Description
Panel	No	The ID of the panel to which the input belongs
Loop	No	The ID of the loop or IO unit to which the input belongs
Addr	No	The ID of the address or IO line of the input
Type/Function	No	The type of the device (if a sensor) or input function (IO address or IO line)
CtrlA	Yes	The primary control group of the input
CtrlB	Yes	The secondary control group of the input
CtrlC1	Yes	The first delayed control group
Delay1	Yes	The delay of the first delayed control group
...		
CtrlC7	Yes	The seventh delayed control group
Delay7	Yes	The delay of the seventh delayed control groups

Editing data in the input table

In **edit mode** the values in column CtrlA, CtrlB, CtrlC1/Delay1..CtrlC7/Delay7 can be changed. In columns CtrlA, CtrlB and CtrlC1..CtrlC7 the control group numbers are entered with the keyboard. In columns Delay1..Delay7 the delay time can be entered with the keyboard or by scrolling with either Shift+ArrowUp / Shift+ArrowDn or Shift+MouseWheel. Scrolling can be done separately for minutes and seconds. ArrowUp / ArrowDn and MousWheel alone moves the focus up or down.

In **row select mode** one or more rows can be selected. If one row is selected the data from that row can be copied to an internal clipboard or the data from the clipboard can be pasted into the selected row. If more than one row are selected, data can be pasted from the clipboard to all selected rows. Data that is copied / pasted are data in columns CtrlA..Delay7

Copy/paste is done with a popup menu, activated by a right click in the table.

Also in row select mode after selecting any number of rows, data for all selected rows can be commonly edited by selecting "**Range edit**" from the popup menu. This opens up a modal window:
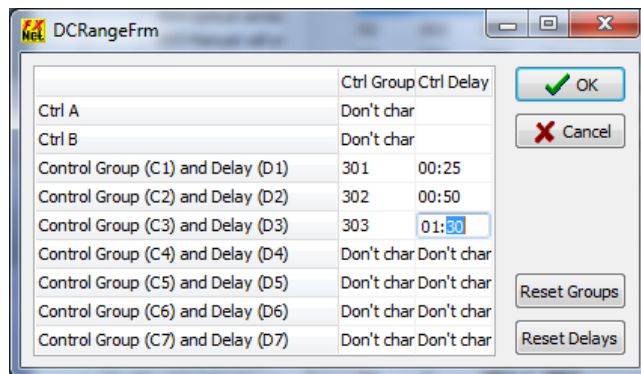
Control Outputs

Outputs are collected in a hierarchical 'tree' on the left side of the lower part of the window, and depending on the selection in that tree, the outputs are listed in the table on the right side. When the topmost node in the tree is selected, all outputs of the FXNet system are listed in the table. When a panel is selected, the outputs of that panel are listed and so on.

The columns in the output table are

Column	Editable	Description
Panel	No	The ID of the panel to which the output belongs
Loop	No	The ID of the loop or IO controller to which the output belongs to
Addr	No	The ID of the address or IO line of the output
Type	No	The type of the device or IO line
Output funct.	No	The output function of the device or IO line
Output 2 funct.		
Ctrl groups	Yes	The control groups that affect the activation of the output
Text	No	The customer text given to the output

Editing data in the output table

The only column that can be edited is the 'Control groups' column. You can Right Click with your mouse to open the Control Groups select dialog.

Delayed Controls Activation sequence

When you select a single input, a window with the outputs that are controlled by the selected input, is shown.

The outputs are listed in order of activation: Immediate, Delayed by CtrlC1, Delayed by CtrlC2 … etc.
Note! Delays T1/T2, set in Panel Data – Delayed Outputs, are not considered in this view.

Notes about delayed controls

The delay times are bound to the input for which the delays are defined. Therefore, different inputs can (but doesn't have to) activate a control group (and thus the outputs that belong to that group) with different delay times.

The delay times Delay1...Delay7 do not have to be in any specific order. It might however, be easier to manage the delayed controls if the delay times are ascending in the order of Dely1 to Delay7.

Delay timers are stopped if the fire alarm condition is reset. If, after reset, the fire alarm condition is raised again, e.g. due to smoke still in a smoke detector, the timers are restarted.

Closing the Delayed Controls window

All changes you have made during the editing of Delayed controls are stored in a temporary memory, so that you can select whether you want to keep the changes or if you want to return to the data you had before opening of the Delayed Controls window. (Still you have to separately save the data in a file for later retrieval).
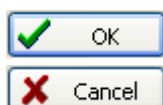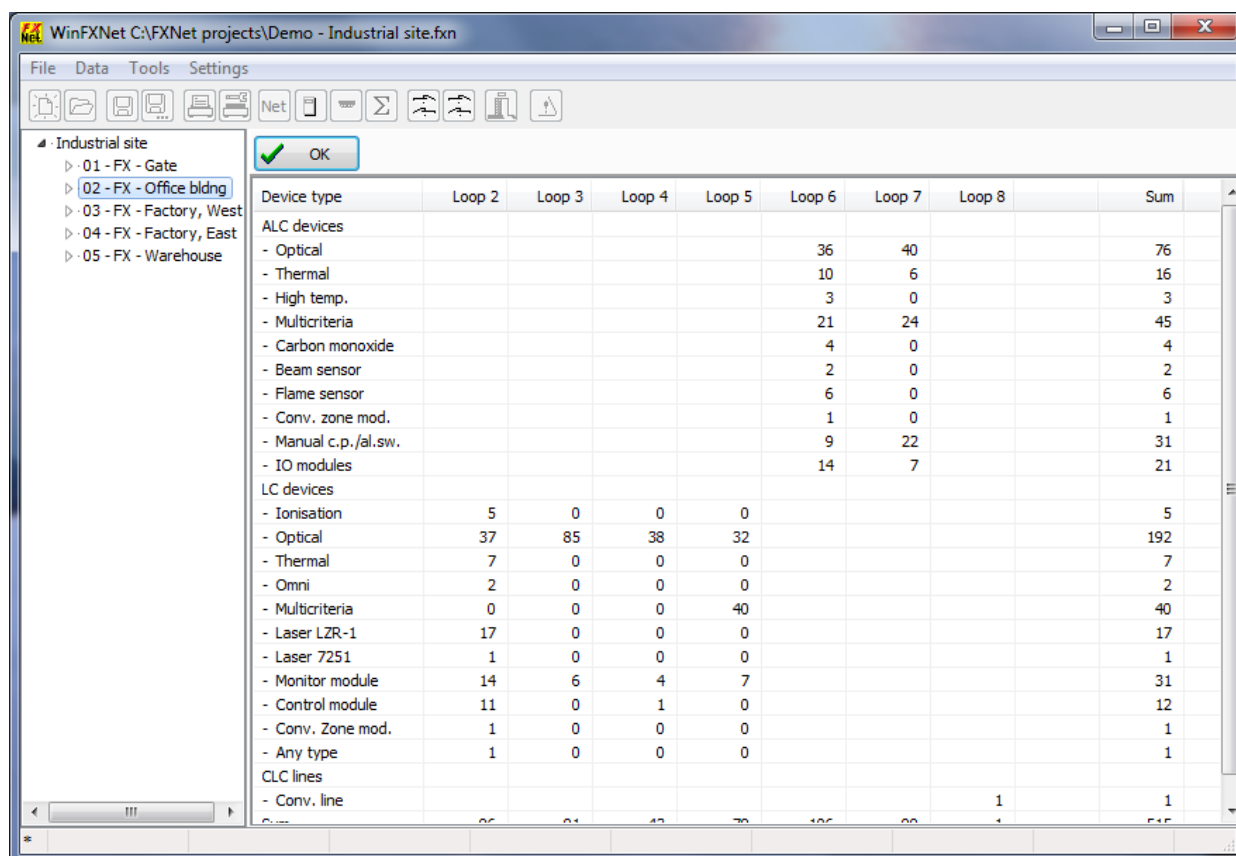
When you have entered or changed control groups and delay times for delayed controls and you want to keep the data you can press the OK-button.

If you want to cancel any changes you have made you can press the Cancel-button.
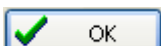
Summary of addresses

Select 'Data – Summary Of Addresses' from the menu or press the Σ speed button to view a summary of the number of addresses in the loops.

A table with the number of each type in each loop will be displayed separately for devices connected to ALC, SLC and LC loop controllers as well as number of CLC conventional lines.

To close the window, press the ✔ OK button.

Address reports

Select 'Data - Address reports' from the menu to create and print sorted and filtered address reports.

Select addresses from

Whole system	Addresses are selected from the whole system. The report will include all addresses in the FXNet system that fulfill the selection criteria (see below).
Panels	Addresses are selected from selected panels. The report will include all addresses in the selected panel(s) that fulfill the selection criteria (see below).
Loops	Addresses are selected from selected loops. Any one or more loops can be selected and the report will include addresses in these loops that fulfill the selection criteria.
Zones	Addresses are selected from selected zones. Up to 250 (consecutive) zones can be selected and the report will include addresses in these zones that fulfill the selection criteria.

Selection criteria

Device family	**Addresses that are configured for the selected loop controller type are included in the report. Note that S200 devices in a SLC loop are included with the AP200 series devices.**
Device kind	**Addresses that belong to the selected kind are included in the report. Selectable kinds are 'Any kind', 'Detectors' and 'IO modules'.**

Sort on item

Loop/address	**The report is sorted in address order.**
Zone Id	**The report is sorted in zone order. Within a zone the addresses are sorted in address order.**
Device type	**The report is sorted in device type order. Within a device type the addresses are sorted in address order. Note that sorting is not done on the textual representation of the device type but on the internal encoding.**

Sort order

Ascending	**Sorting order is ascending.**
Descending	**Sorting order is descending**

Include in report

Panel	The panel number column is included in the report.
Address	The address column is included in the report. This is allways selected.
Zone	The zone column is included in the report.
Device type	The device type column is included in the report.
Input function	Currently not selectable.
Output function	Currently not selectable.
Text	The text column is included in the report.
Tested checkbox	The 'Tested' checkbox column is included in the report. The purpose is to enable documentation of tested addresses as a final step in a commssioning. The installer prints out a report and marks the tested addresses as the testing proceeds.

Navigating between pages

Navigation buttons	The buttons provide stepping to the first page, -10 pages, -1 page, +1 page +10 pages and to the last page.

Font selection

Font button	The button opens a font selection dialog to select font type and size.

Line height selection

Line height list	The dropdown list offers selection of line heights in the range 100% .. 200%.

Printing to printer

Print button	The button opens a dialog for selection of printer and the pages to be printed.

File Opening, Merging and Saving

Opening an existing file

Select 'File - Open' from the menu or press the button to open a file. The file is verified to be an FX file and is then read into memory and you can work with the data.

Merging an existing FX file

Select 'File - Merge FX file ...' from the menu (this function has no toolbar button). The file may be a file for a standalone panel or contain data for several panels. The data of the panels in the file are merged with configuration data already in memory.

If configuration data already in memory contains a panel with the same ID as any of the panels in the file, you will be prompted to resolve the ID conflict.
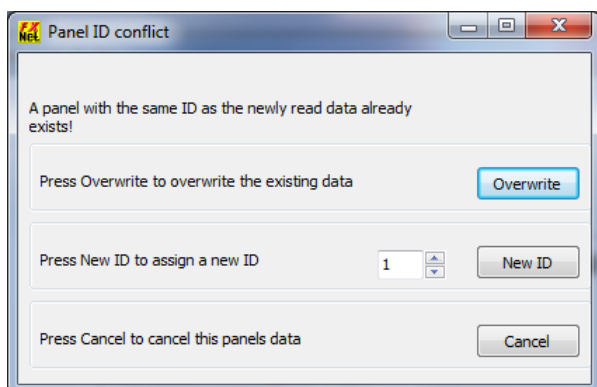

 If you select to Overwrite, the data of the panel in memory with the same ID will be overwritten with the data of the panel in the file.

 If you select a new ID with the up-down buttons and press 'New ID' the data of the panel in the file will be merged with the new panel ID.

 If you select 'Cancel' the data of the panel in the file will not be merged into memory.

Merging an existing ESA file

Select 'File - Merge ESA file ...' from the menu (this function has no toolbar button).
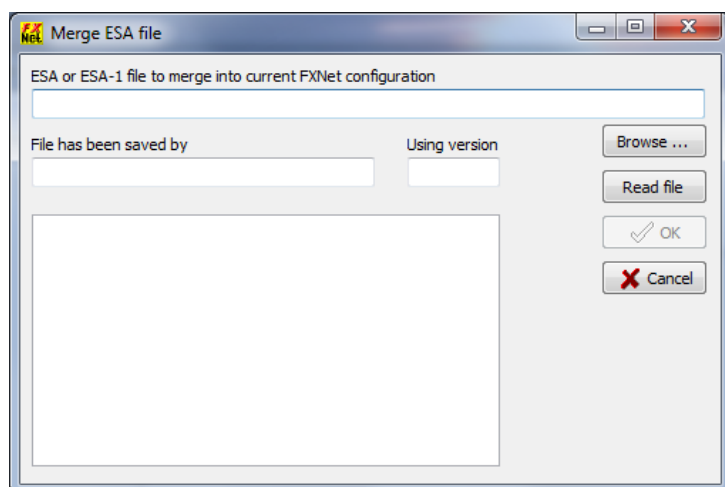
The "Merge ESA file" dialog has an edit field for the ESA file name. Type the name of the file (including path) or click "Browse ..." to select a file from the standard file open dialog.

Click the "Read file" button to read the file. The "File has been saved by" field will show the licensee who has saved the file and the field "Using version" will show the version of the ESA configuration tool with which the file was made. Additional information about the file will be shown in the large edit field. Verify that the file indeed appears to contain the configuration data you want to merge.

Click the "OK" button to perform the conversion into an FX configuration. Since some data items in the ESA configuration do not have a direct correspondence in the FXNet data items, a list of data items that might need the user's attention is produced and shown in a separate window. Do not close this window before you have verified and/or changed the listed data items.

The "Cancel" button will cancel the operation if clicked before the "OK" button.
Settings that needs to be set manually:

ESA IO settings	The ESA-2 panel inputs and outputs are setup with switches and jumpers and can therefore not be determined from the configuration file. ESA-1 input and output functions are set in the configuration, so could be converted. However, there's no direct correspondence between the physical inputs and outputs (MC IO or IOC or OCA) so the IO settings are left to the user
Seeing - Visible panel relations	Since the ESA-MESA or ESA-MAXI systems do not have the concept of seeing - visible panel relations, these have to be set by the user
Control groups	The ESA panels do not have the concept of control groups. Therefore the CtrlA and CtrlB settings of inputs and Control Groups settings of outputs need to be set manually, if the default settings are not suitable. The default setting of the conversion leaves the "CtrlA" and "CtrlB" fields of inputs empty and "Control Groups" field of outputs as "Local" if the output function was a "Zonal" function or "General" if the output function was a "General" function.
Input functions	Some ESA input address settings do not have a corresponding input function for the FX addresses. These addresses are removed from the configuration.
Output functions	Some ESA output address settings do not have a corresponding output function for the FX addresses. These addresses are removed from the configuration.

Saving data to a file

Select 'File – Save' from the menu or press the ⊞ button to save the data in a file with the same name as when you opened the file.

Select 'File – Save As ...' from the menu or press the ⊞ button if you want to change the filename or if it is a new file.

The program creates a backup file of an existing file that has the same name as you attempt to save. The existing file is renamed by adding an extra extension in the format "~xx~" where xx is a numeric value from 00 to 99. The number of backup files is fixed to 10 and if the number of backup files increases over 10, the oldest file is deleted. E.g. when backup file ~10~ is created, the backup file ~00~ is deleted.

Printing

Printer setup

Select 'File – Printer setup ...' from the menu or press the ⊟ speed button to setup your printer.
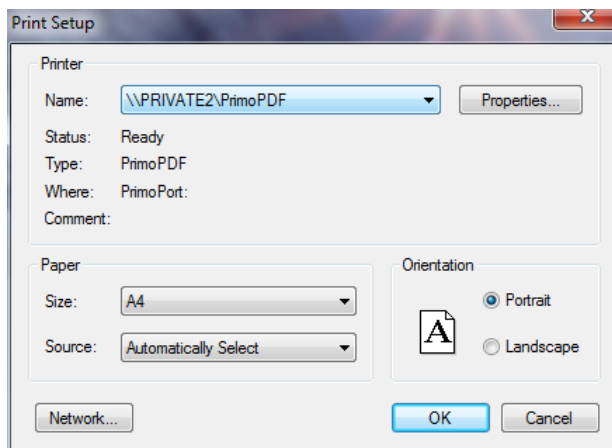
The printer set up dialog may look different in your computer because it is provided by your printer driver or by your operating system

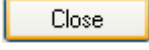Recommended setting for the orientation is 'Portrait'.
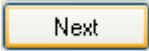
Printing the data

To print the configuration data, select in the left pane whether you want to print the network data or data of an individual panel.

Then select 'File – Print' from the menu or press the [🖶] speed button to print the data.

You will be presented a preview of the selected data.
The Preview window has the following buttons:

Previous	To scroll to the previous page
Next	To scroll to the next page
Print	To print the data on a printer
Close	To close the preview window

If you selected FXNet data to be printed, you will be presented a preview of the data to be printed:
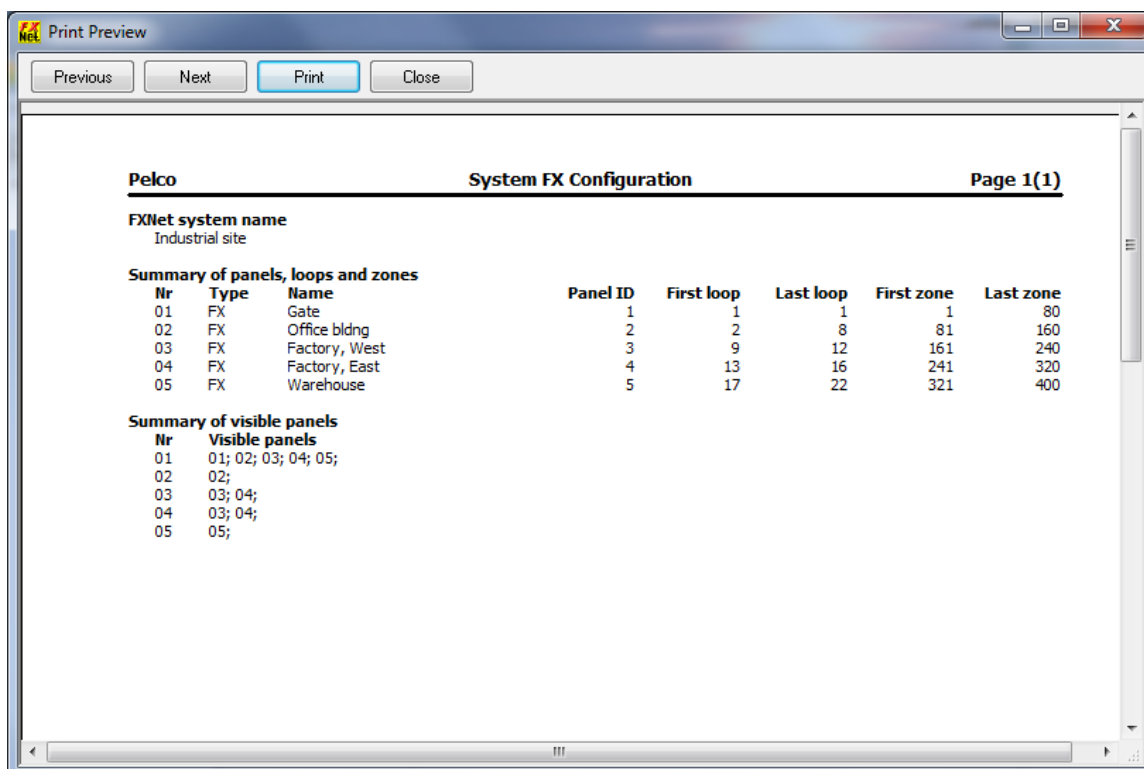
If you selected a panel's data to be printed the following preview window will be shown:
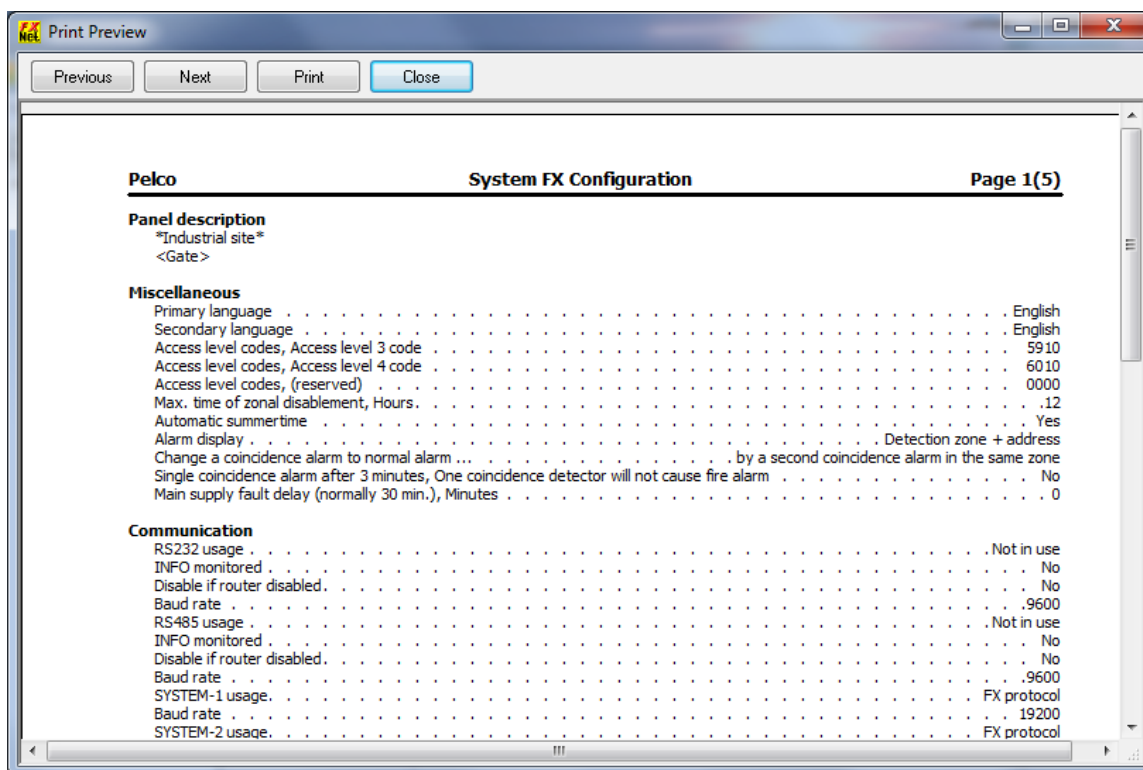
To send/receive data to/from the panel

Sending data to a panel

Select the panel to which you want to send data in the left pane.

The select 'Tools – Send To Panel ...' from the menu or press the ⬛ speed button to send configuration data to the panel.

Reading data from a panel

Reading data from a panel can be considered similar to merging a file. You have to select the FXNet level (root level) in the left pane.

Then select 'Tools – Receive From Panel ...' from the menu or press the ⬛ speed button to receive existing configuration data from the panel.

If a panel with the same ID as the one you are attempting to read from already exist, you will be prompted to resolve the Panel ID Conflict, just as with merging files. See chapter 0 for details on options.

Communication handler dialog

The sending and receiving dialogs (Communication handler) are identical except for the 'Send' and 'Receive' buttons that are enabled or disabled depending on if you are sending or receiving.
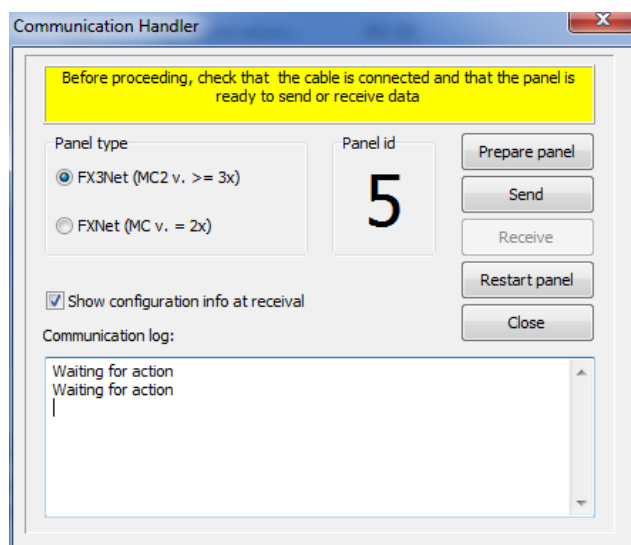
Important! Set the 'Panel type' selection correctly according to the Master Controller (MC) type, MC or MC2, and the software version installed in the panel.

When sending to panel	FX3Net (MC2 v. >= 3x)	MC2 type, sw version 30 or higher
	FXNet (MC v. = 2x)	MC type, sw version 20 ... 29
When receiving from panel	FX3Net (MC2 v. >= 3x)	MC2 type, sw version 30 or higher
	FXNet (MC v. = 1x, 2x)	MC type, sw version 10 ... 19, 20...29

The 'Show configuration info at receival' checkbox, if checked, will display information about the configuration data currently existing in the panel and you will have the option of cancel the data transfer.

The buttons in the dialog have the following functions:

Button	Meaning
Prepare the panel	To prepare the panel to send or receive data. The panel indicates that it is ready for configuration in its LCD.
Send	To send configuration data from the PC to the panel
Receive	To receive existing configuration data from the panel to the PC
Restart the panel	To restart the panel after the transmission of configuration data.
Close	To close the communication handler dialog.

When you select to send or receive a communication setup dialog will be shown:
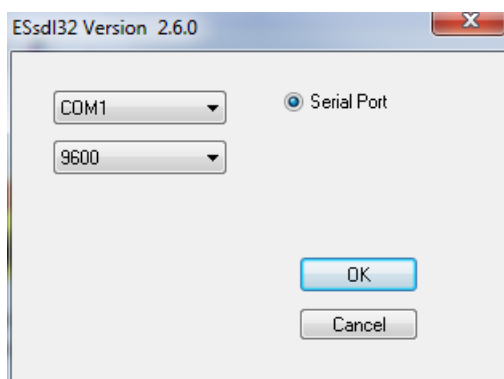
Select the communication port in your PC which is connected to the panel.
Leave the communication baud rate as '9600'.

When you select OK to proceed, a communication server window will be shown:
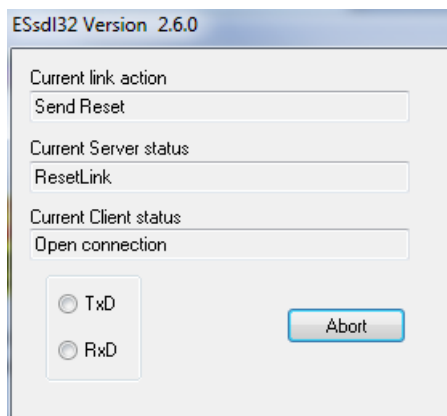
The 'RxD' and 'TxD' led imitators will flash green when data is received or transmitted.

If the communications seems to stop for longer than a minute make exact notes about the messages in the 'Current link action', 'Current link status' and 'Current server status' fields.

When data transmission is ready the communication server window will close and focus will be returned to the Communication handler for further actions by you.

To EXIT the program

Click the Terminate button, [X], or select '**File – Exit**' from the menu or click the [icon] button to terminate the program. If you have made modifications that are not yet saved, you will be prompted whether you want to save before termination.